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WATERFRONT DEVELOPMENT PROJECT

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Hull Waterfront Development Project

Prepared by the Metropolitan Area Planning Council

110 Tremont Street

Boston, MA

August 1982

ABOUT THIS REPORT

The Hull Waterfront Development Project was prepared by the Metropolitan Area Planning Council for the town of Hull. The Metropolitan Area Planning Council is the officially designated regional-planning agency for 101 cities and towns in the Boston metropolitan area. The Council helps its member communities plan in the areas of land use, environmental quality, transportation, solid waste, hazardous materials, air quality, housing, and economic development.

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SUMMARY

Prompted by a request for assistance, the Metropolitan Area Planning Council (MAPC) has formed recommendations for development at two underused locations in Hull - Nantasket Harbor and Sagamore Harbor. Of these, Nantasket Harbor, by virtue of its closeness to existing attractions and transportation facilities, was found to have the far greater commercial-expansion potential. Its area is at the entrance to Hull and is bordered on the west by the harbor itself, on the east by Nantasket Beach, on the north by Bay Street and Hampton Hill, and on the south by George Washington Boulevard and Rockland Circle. The five dominant features of the project area are Paragon Park, one of the oldest amusement parks in the country; Nantasket Beach, administered by the Metropolitan District Commission and stretching more than a mile along the coast; Nantasket Harbor, which contains a federally maintained channel for boats; Nantasket Pier, 700 feet long, extending into the harbor; and George Washington Boulevard, the major thoroughfare, which runs along the harbor, the back of the amusement park, and the pier.

The Council's study of the Nantasket area includes land-use, economic, and design analyses, and recommendations for future use. The major findings are outlined below.

1. LAND USE: ENVIRONMENT

Of the three major land-uses at Nantasket - Open Space/ Recreation, Commercial, and Residential - the first two are what concern us here. The focal points of the project area are oceanside activities and businesses; the Nantasket Pier area is relatively underused.

The project area is also in a federally designated flood-hazard zone and is a state-designated barrier beach. Neither designation precludes all development, but both make it more difficult and more expensive to build within the project area than in an unregulated area.

2. TRANSPORTATION AND PARKING

Sixty-seven percent of all visitors drive to Nantasket. Year-round bus service from Quincy is available, as is summer ferry service from Boston. Parking lots, mostly MDC administered, provide approximately 1400 spaces and appear to

serve existing uses adequately. Future development in the project area, however, will generate the need for additional parking.

3. SOCIOECONOMIC PROFILE

During the '70s, Hull's population and employment growth lagged behind that of surrounding towns. Per-capita income also did not keep pace; at \$5278 in 1977, it was over \$1500 below that of the surrounding area. These statistics show how weak Hull's economy has been in recent years.

4. EXISTING MARKET CONDITIONS

Between 1972 and 1977, retail sales in Hull were down by 12.5 percent and the number of establishments dropped by 21 percent. In the same period, service sales fell by 20 percent and the number of area hotels and motels decreased too. Further, the retail mix in the project area is marked by a concentration of eating and drinking places. Recreation and amusement are an important part of Hull's economy and most are within the project area. Sixty-five percent of all businesses at Nantasket are tourist-related, and because the primary reason for coming to the project area is recreation, the potential for increasing the retail-market capture is limited. As noted, the retail mix is unbalanced, and shopper-survey results indicate that only a small percentage of visitors come to Nantasket to shop. Obviously, the beach and the amusement park, the largest tourist attractions, are critical to any discussion of market growth.

5. DESIGN

Building appearance and signs and landscaping are important to the marketability of the project area. Consistent signs, better storefront design, more maintenance, and improved landscaping, particularly at entrances to the area, are all recommended, and general guidelines are provided in the design-analysis section. In addition, pedestrian ways among attractions, such as between the pier and the beach, need clearer markings and other improvements.

6. MARKET POTENTIALS

It is estimated that a 200-300 boat marina could be supported in Hull. The successful development of a marina at Nantasket Pier would create support for such additional businesses as a boat shop or restaurant. The integration of

a marina with other commercial, recreational, and transportation uses could make the pier an important economic asset to the area.

- Proposals to broaden Hull's retail base by adding "specialty shop's along Nantasket Pier have been made. Such development is unlikely given current conditions within the project area.
- Planned improvements to Nantasket Pier also raise the possibility of additional restaurant sales. It is important to remember, however, that the market already is nearly saturated with restaurants and bars, so expansion in this category depends heavily on the competitiveness of any dining facility.
- Hotels or motels in the project area must tap demand generated by existing facilities and future development. Given the lack of vacant land available for development, the existing competition, and the current demand, major hotel or motel development is unlikely. Currently, the project area could probably support only a small motel.
- While there is little room for Paragon Park to expand, improvements could focus the amusement-park, Nantasket Avenue, and the pier, on a theme. Hull could encourage such development by formulating design guidelines for the area. Expansion, if controlled and designed for, would improve the quality and appearance of the area. If coordinated with marina development and renovations, additional recreation-oriented businesses would be beneficial.

In summary, Hull's economy currently is sluggish and has experienced losses in both employment and sales during the past decade. To improve its market position during the 1980s, it is tourism to which Hull ought to look for growth, to broaden its attractions, and to make the Nantasket area more attractive to visit. There is little indication that much

office or industrial expansion will occur in the project area, but Nantasket does have fairly strong tourism on which to base growth.

Coastal communities represent a regional resource for outdoor recreation and open space. Hull's oceanfront location within densely developed metropolitan Boston makes it a town with strong potential for more tourism. Through careful development and renovations in the Nantasket area, Hull could begin to tap more of this market and regain economic health.

SUMMARY OF MAJOR RECOMMENDATIONS

1. Pursue designation of the Nantasket Harbor Area as a Commercial Revitalization District (CARD).
2. Rewrite and enforce the town's sign ordinance.
3. Change the zoning regulating Nantasket Pier from Public Open Space to Commercial Recreation-A.
4. Work with MDC to improve pedestrian amenities along the beach and seawall.
5. Develop marina expansion plans for Nantasket Harbor.
6. Renovate Paragon Park through theme development.

I. INTRODUCTION

Hull once was one of the most popular summer resorts on the Eastern Seaboard. At the turn of the century, thousands of visitors came to Nantasket by train and ferry to enjoy beaches, luxurious hotels, and an amusement park, and Hull's economy, quite naturally, developed around them. Visitors arrived by electric train or on one of the eleven steamships that docked at Nantasket Pier. As the automobile became more used and train and ferry service declined, tourism in Hull changed. Most tourists began making day trips, and their activity shifted away from the Pier and the hotels. The beach remained popular, however, and Paragon Park and Nantasket Avenue continued to develop.

Today, Hull is concerned that its economy lags behind that of the surrounding area, and it would like to strengthen its economy. Although tourism still is Hull's largest industry and is centered at Nantasket, that area has declined in recent years. In addition, several parcels near Nantasket have remained vacant. Hull therefore applied to MAPC in 1980 for assistance in assessing development possibilities for these areas and in revitalizing the Nantasket Harbor area. Recognizing that coastal communities provide open-space and recreation areas for the entire region and that the economic stability of these communities is essential to their ability to support such areas, MAPC accepted Hull's request for economic-development help.

To aid in the planning, a task force of citizens was formed. Information presented in this report was developed at their request.

Project Areas: Nantasket and Sagamore Harbors

In their request for assistance, Hull defined two areas for analysis. The first was the Nantasket Harbor area, which included the Nantasket Pier and two vacant parcels on George Washington Boulevard. This area is at the entrance to Hull, behind Paragon Park and across the peninsula from Nantasket Beach. The second area was a portion of Hull's urban-renewal site at Sagamore Harbor. It consists of a cleared parcel along a shallow harbor and is farther out on the Hull peninsula than Nantasket.

During the course of MAPC's study it became necessary to alter the area boundaries and the range of analyses. The Nantasket Harbor project-area boundaries were expanded as information became available which suggested that development potentials in the Nantasket Pier area were linked to current conditions surrounding Nantasket Beach, Paragon Park, and the commercial/recreational activities across the peninsula. In order to determine realistic development potentials for the pier, the land use, environmental, and economic conditions of these neighboring activities were included in the analysis.

As part of the urban-renewal site, the Sagamore Harbor parcel has long been designated a marina site. With this in mind, the local project committee was especially interested in an analysis of the feasibility for marina development within Hull and at Sagamore Harbor specifically. While general market indicators suggest that Hull should pursue marina development, site characteristics suggest that Sagamore Harbor is not the best location. The Council feels that marina development is more appropriate in Nantasket Harbor. In fact, any development at the Sagamore site will be extremely difficult because of current environmental standards and requirements. As a result, MAPC's analysis of Sagamore Harbor has comprised a general environmental study of current conditions and recommendations for the development of Sagamore Harbor as an area of public open space. A detailed feasibility study of this location may be found in the appendix.

Based on the potential for development at Nantasket Harbor and the unsuitability of Sagamore Harbor for development; MAPC, with the support of the local project committee, has focused on the revitalization of the Nantasket Harbor area.

Casino Gambling

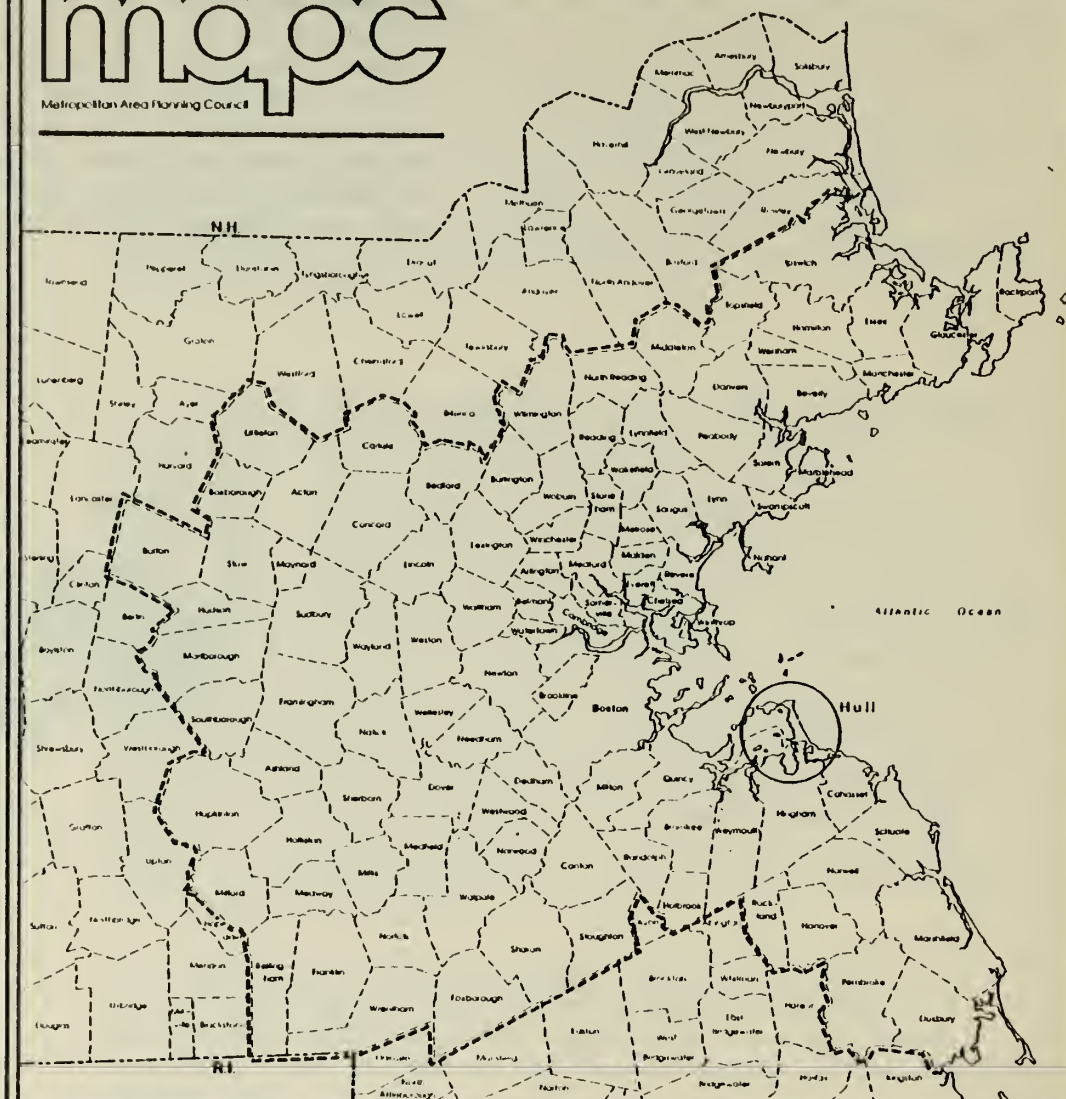
The results of MAPC's analysis indicate that under existing conditions new development on and around Nantasket Pier depends on improving the entire project area. Only

with improvements to Paragon Park and the Nantasket Avenue arcade/boardwalk area will other development have a reasonable chance for success. With this in mind, the town cannot afford to wait for the resolution of the casino issue before development attempts are made. In fact, none of the recommended actions precludes casinos. Design improvements, marina development, and reinforcement of existing recreational businesses will benefit both Hull and the project area regardless of the outcome of the current gambling debate.



mapc

Metropolitan Area Planning Council



Scale in Miles



--- MAPC boundary

Drawn: September, 1978

II. LAND USE ANALYSIS

A. STUDY AREA

The town of Hull is mostly a long peninsula that juts out into Massachusetts Bay and forms the southern border of Hingham Bay. The oceanside creates a barrier against the sea, while the bayside consists of a series of shallow harbors. Map 1 illustrates Hull's location in the region.

The study area has two major sub-areas: one around Sagamore Harbor and one around Nantasket Harbor. Sagamore Harbor consists of the cove immediately north of Sagamore Hill and the land immediately east of this cove. The other sub-area is bounded on the west by Nantasket Harbor and on the east by the MDC-administered Nantasket Beach. The harbor is part of the Weir River, which divides Hingham and Hull and eventually flows into Hingham Bay. The project area is bounded on the north and west by Bay Street and the shoreline of Hampton Hill. To the south and east, George Washington Boulevard and Rockland Circle form the border. Map 2 shows the project-area locations.

For the purposes of this study, the area has been divided into six sub-areas: Paragon Park (includes the arcade/boardwalk area), the MDC beach, Nantasket Pier, Nantasket Harbor, George Washington Boulevard, and Sagamore Harbor. Each of these areas contains assets and drawbacks for development.



1. Sagamore Harbor

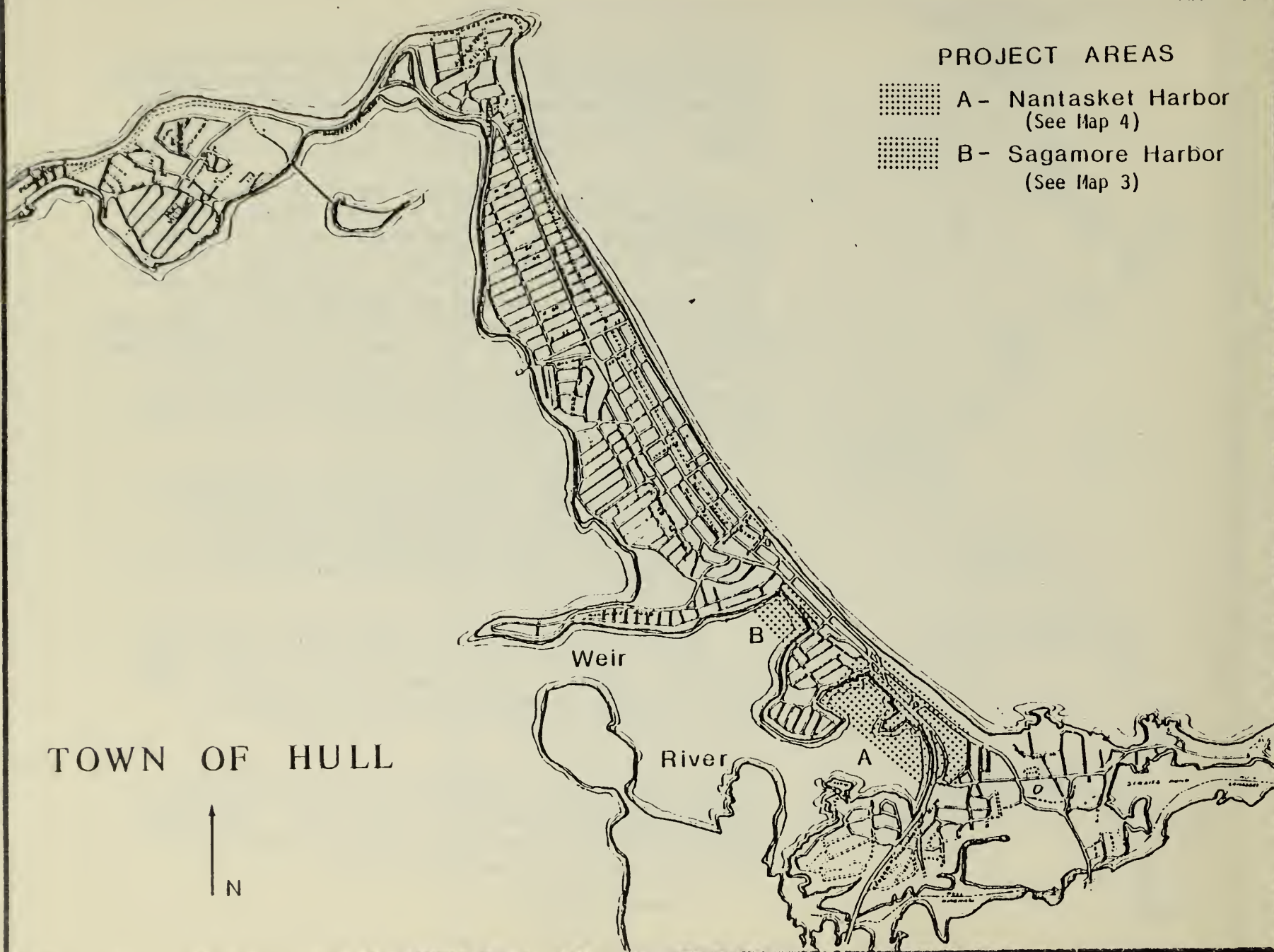
Sagamore Harbor itself is a large tidal cove of the Weir River. As noted, the land that abuts it to the east is vacant except for a small public-utility parcel. This land is crossed by Nantasket Avenue from southeast to northeast, the principle route to all of Hull.

2. Paragon Park

One of the oldest amusement parks in the country, Paragon Park occupies approximately 300,000 square feet in the southeastern corner of the project area. The arcade/boardwalk runs along the eastern side of the park, on Nantasket Avenue, overlooking the beach.

PROJECT AREAS

-  A - Nantasket Harbor
(See Map 4)
-  B - Sagamore Harbor
(See Map 3)



The park and its surrounding amusements contain more than 50 attractions, including 18 major rides. The roller coaster, the park's predominant physical feature, is rated in the top ten nationally.

3. MDC Beach

Nantasket Beach extends a little over a mile along Nantasket Avenue and the southern end of Hull Shore Drive. Parking areas and a seawall separate the beach from the roads. At high tide the beach is almost completely under water, forcing most visitors to wait in the parking areas.

The MDC maintains several buildings on adjacent parcels, including a large pavilion, a bathhouse, several restrooms, and a police station. There are also two playgrounds and a picnic area overlooking the beach. MDC parking lots provide approximately 1075 spaces.

4. Nantasket Pier and

5. Nantasket Harbor

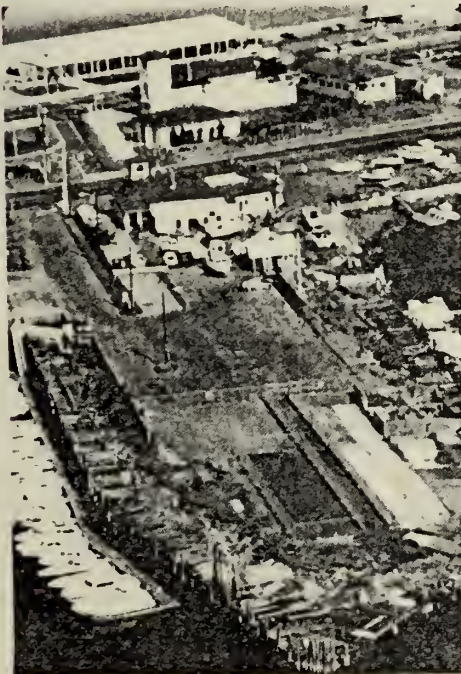
The pier, approximately 200 feet across, extends approximately 700 feet into the middle of Nantasket Harbor. It uses include slips for a local marina, town floats, and a docking area for the summer ferry.

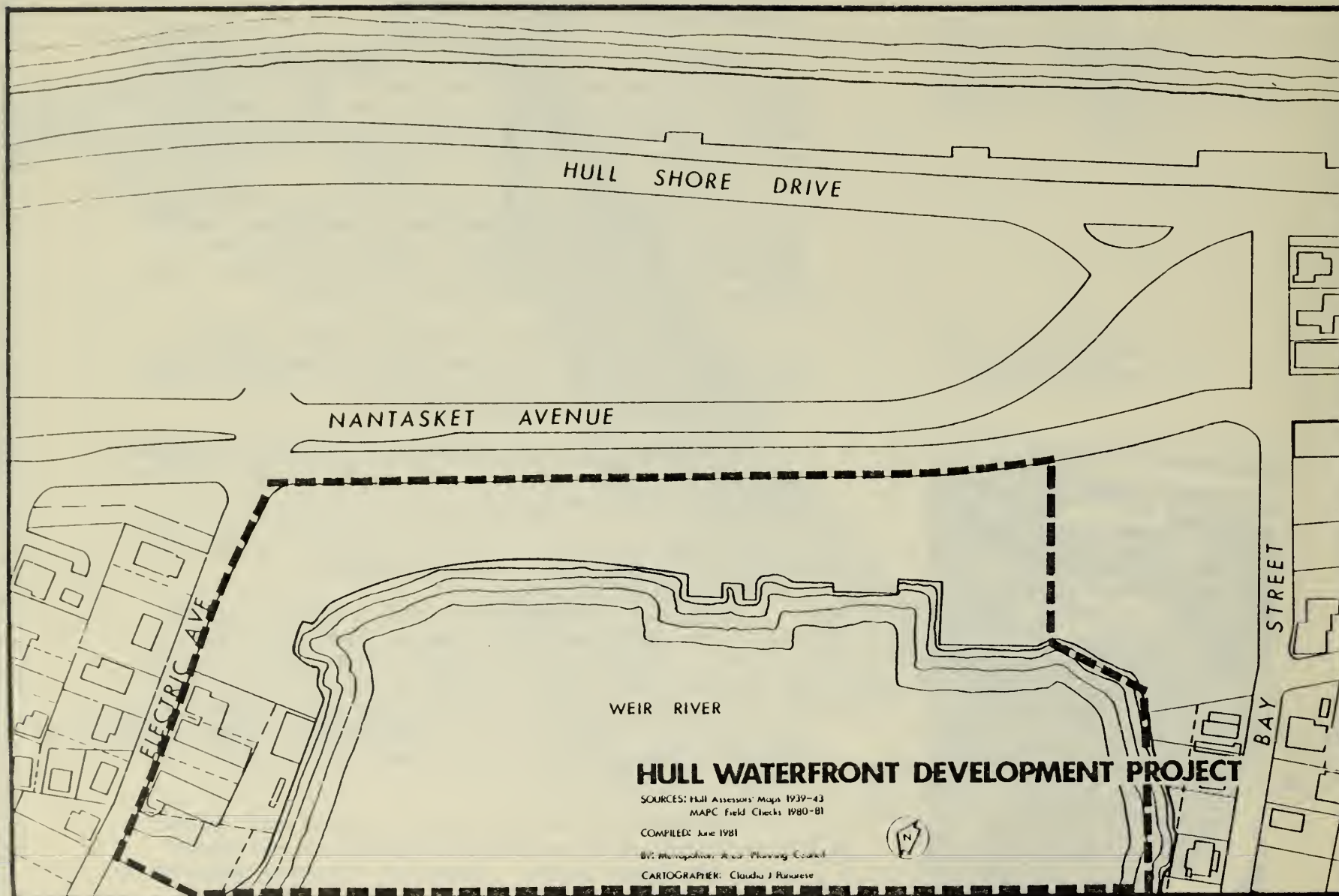
There are three major buildings on the pier: a lobster pound/seafood restaurant, a marine-supply company (includes boat sales), and a marina.

The pier currently is in poor condition, but the MDC has allocated \$640,000 for 1982 to upgrade it.

The harbor surrounding the pier is shallow: at low tide it is almost completely exposed clamflats. The exceptions are the federal channel, which runs to the end of the pier, and the areas alongside the pier, which have been dredged for boat use. The channel is maintained by the Army Corps of Engineers and is approximately six feet deep at mean low water (MLW), which allows ferry service to operate from the pier.

The harbor currently is used by recreational boaters. As mentioned, ferry service also operates in the harbor during the summer months. Commercial fishermen occasionally use the pier as a "safe harbor." Icing in the winter, however, prohibits year-round use both by the ferry service and by commercial fishermen.





WEIR RIVER

HULL WATERFRONT DEVELOPMENT PROJECT

SOURCES: Hull Assessors' Maps 1939-43
MAPC Field Checks 1980-81

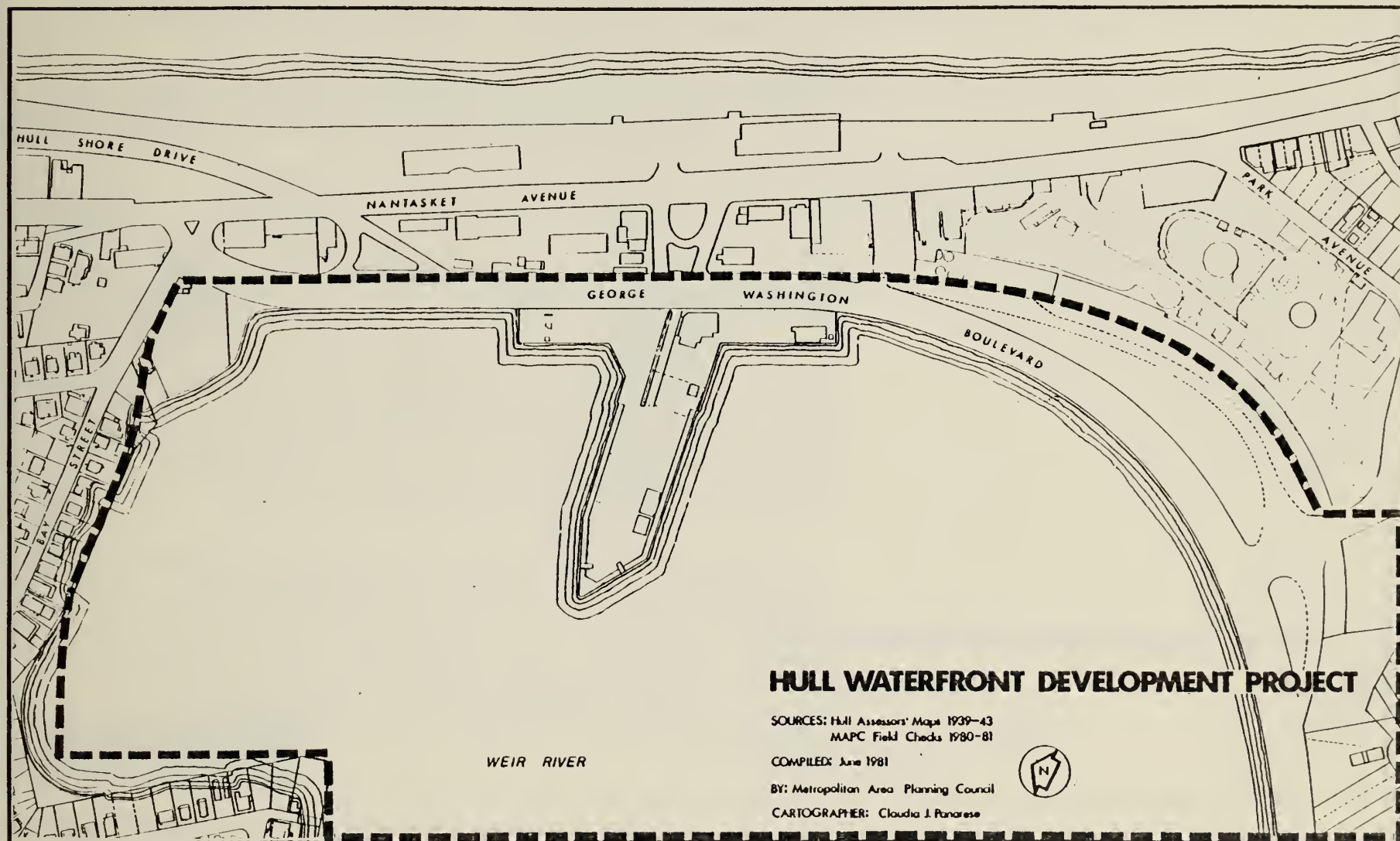
COMPILED: June 1981

BY: Metropolitan Area Planning Council

CARTOGRAPHER: Claudia J. Rucione

SAGAMORE HARBOR

PROJECT AREA



HULL WATERFRONT DEVELOPMENT PROJECT

SOURCES: Hull Assessors' Maps 1939-43
MAPC Field Checks 1980-81

COMPILED: June 1981

BY: Metropolitan Area Planning Council

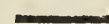
CARTOGRAPHER: Claudia J. Panarese



NANTASKET HARBOR

ORIGINAL PROJECT AREA

EXPANDED PROJECT AREA



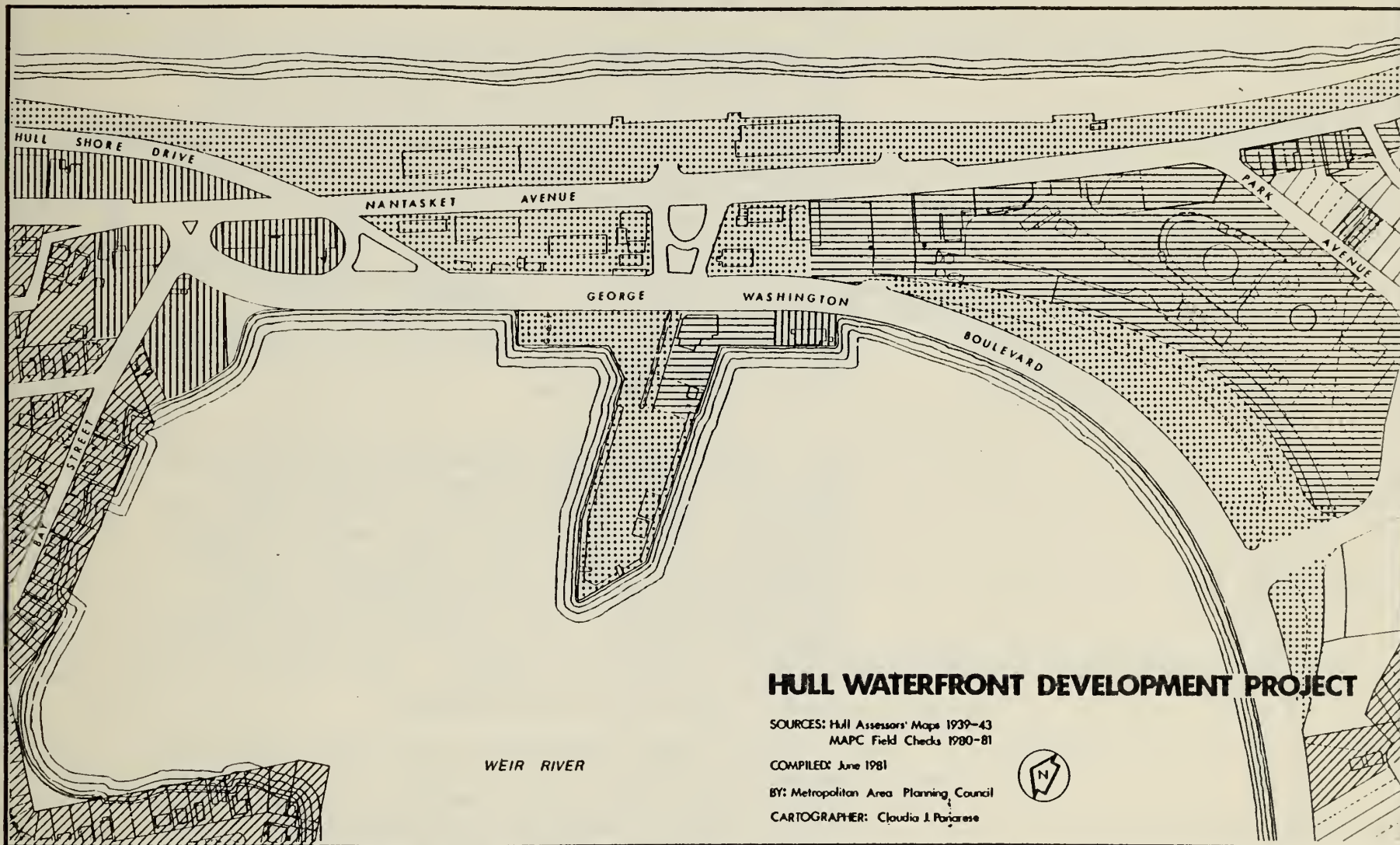
6. George Washington Boulevard

The boulevard runs along the shore of the harbor, providing access to the pier. As one approaches Hull from Hingham, the road provides a sweeping view of the harbor, the pier, and the residential hillside beyond. It also provides a view of the MDC parking lot behind Paragon Park, the back of the buildings on the boardwalk, and the roller coaster. George Washington Boulevard is wide and undivided, two lanes in each direction.

B. MAJOR LAND USE TYPES

The three major land uses within the project area (other than the vacant land in the redevelopment area) are open-space/recreation, commercial/recreation, and residential. The MDC beach and surrounding facilities are in the open-space/recreation category, of course, while the amusement park is commercial/recreation. The project area contains some retail and service establishments and housing, but the center of activity is the beach and the amusement park. The vacant parcel at Bay Street and George Washington Boulevard, the underutilized Nantasket Pier area, and the MDC parking areas once again emphasize that the focal points of the project area are the oceanside activities and establishments. Map 5 indicates land uses in the Nantasket Harbor area.

The automobile's domination of land uses can be seen in the number and layout of roads and intersections and the location of beach parking. Design improvements along the seawall would result in increased pedestrian areas, amenities, and access. Since improvements planned for the pier will increase pedestrian traffic in the area, plans to improve facilities, sidewalks, amenities, and signs for visitors on foot will also improve the character and quality of the area.



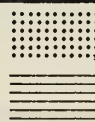
LAND USE



- COMMERCIAL



- RESIDENTIAL



- OPEN SPACE/RECREATION



- COMMERCIAL/RECREATION

C. ZONING

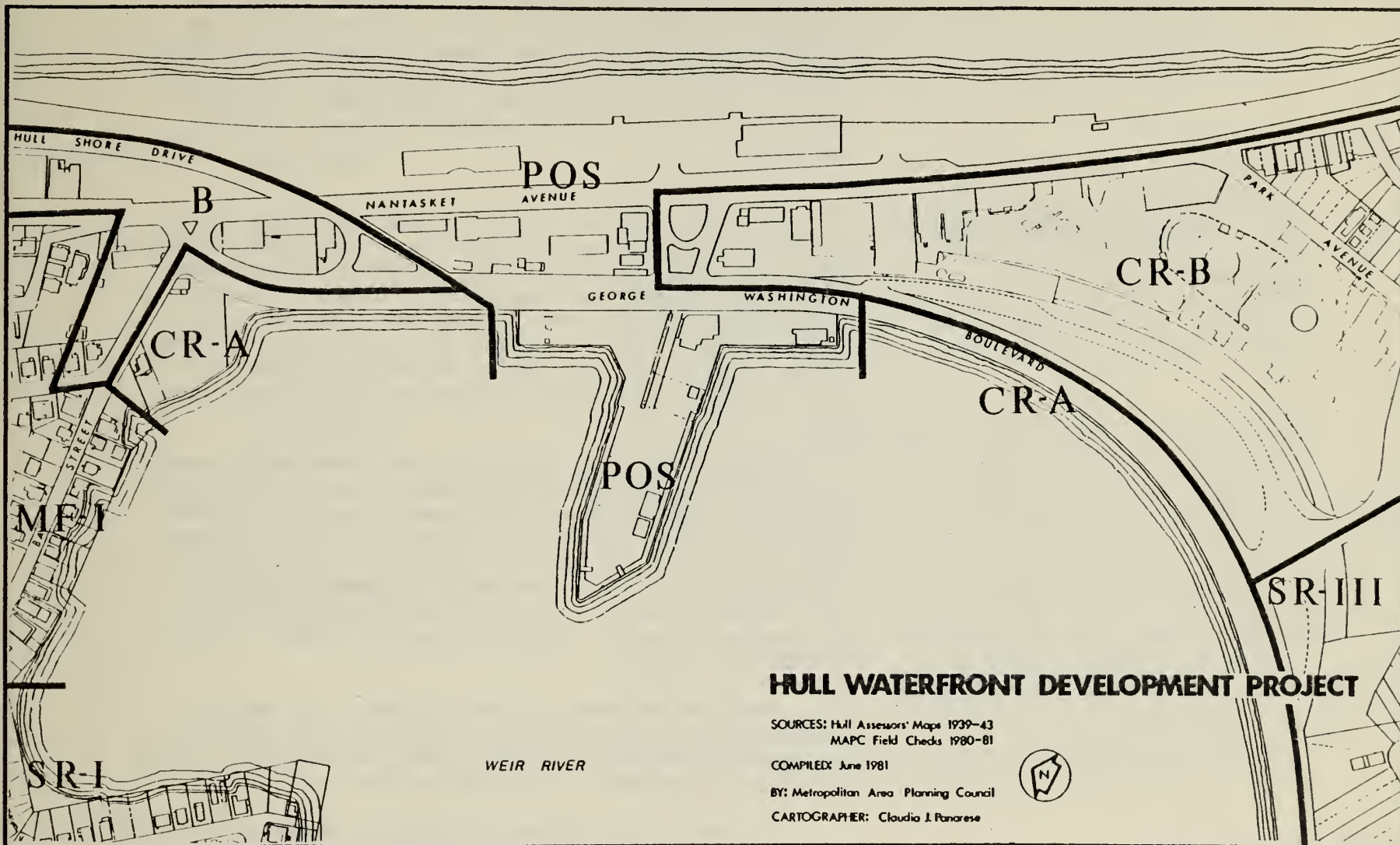
As indicated in Map 6 , there are four general categories of zoning in the Nantasket Harbor area and seven specific sub-categories.

Residential zoning in the project area allows only single-family residences in two of the three districts (SR I and SR III). The district allowing multi-family housing (MF I) is on the northwestern side of this area, adjacent to a commercial area, and has the greatest concentration of population. The SR I and SR III areas require a minimum lot size of 6,500 and 12,000 square feet respectively, the MF I area requires 5,000 square feet per unit.

Business zoning (B) allows for any wholesale, retail, or service business, except amusements. As the map illustrates, the only area currently zoned for business is at the intersection of George Washington Boulevard, Nantasket Avenue, and Hull Shore Drive. It extends beyond the project area along Nantasket Avenue.

Three areas are designated commercial/recreation (CR) here. The two sections of bayside shoreline from Eastern Avenue to the southern corner along George Washington Boulevard, excluding Nantasket Pier, are zoned commercial/recreation A. This allows both single- and multi-family residences, hotels, motels, inns, and marinas. The area encompassing Paragon Park and the boardwalk is zoned commercial/recreation B. This category does not allow single-family residences but includes all other commercial/recreation A uses and, in addition, allows places of amusement and convenience shopping. This is the only zoning district in Hull that allows amusements.

"Public open space" is the final category present here, and it includes town and MDC property. The Nantasket Pier, the MDC Nantasket Beach, and surrounding areas are included in this category. Commercial establishments exist at both the MDC- and the town-owned properties. The MDC allows vendors in its beach pavilion, and the town has leased space on the pier to a number of marine-related businesses.



HULL WATERFRONT DEVELOPMENT PROJECT

SOURCES: Hull Assessors' Maps 1939-43
MAPC Field Checks 1980-81

COMPILED: June 1981

BY: Metropolitan Area Planning Council

CARTOGRAPHER: Claudio J. Panarese



ZONING

CR-A COMMERCIAL RECREATION A
SR-I SINGLE RESIDENCE I
MF-I MULTI-FAMILY RESIDENCE I

CR-B COMMERCIAL RECREATION B
SR-III SINGLE RESIDENCE III
POS PUBLIC OPEN SPACE

B BUSINESS

The Sagamore Harbor area also contains one of these zoning classifications, commercial/recreation, covering most of its land area. The entire cove shoreline (except for the utility parcel), as well as the southern half of the oceanside area, is classified commercial/recreation. The remainder is classified multi-family residence III (MF III), which is similar to multi-family I but permits a few more uses (e.g., boarding house) and does not have a height restriction.

D. TRANSPORTATION AND PARKING

Two of every three visitors to Hull reach town by car, driving in on either Route 228 or George Washington Boulevard. There is also year-round, private, bus service from Hingham and a public, summer bus from Quincy. During the summer, visitors can take the ferry from Boston, which docks at Nantasket Pier. It is estimated that an average of 30,000 people per day visit Hull during the summer months, with peak attendance on weekends approaching 100,000 people per day.

Parking lots in the Nantasket area serve mostly beach and amusement-park visitors and appear to be adequate. The MDC lots have approximately 1075 spaces, and are in front of Nantasket Beach and behind Paragon Park. Of the private lots in the area, the two major ones are vacant parcels being used for parking. The larger is behind Paragon Park, and the other is at the corner of Bay Street and George Washington Boulevard. There are about 325 spaces in these two lots.

Other parking areas include one small lot, behind the amusement park, on Park Avenue, a shoppers' lot between Nantasket Avenue and Hull Shore Drive, and on-street parking along Nantasket Avenue at designated times and spaces.

The complex road system also appears to adequately handle all but the peak volumes of traffic. As expected, large numbers of beach or amusement park users entering or leaving at the same time cause congestion and tie-ups. Access between Nantasket Avenue and George Washington Avenue however is

limited to one intersection at Wharf Avenue (across from the pier). Motorists who miss this intersection cannot reverse direction without proceeding all the way to Sagamore Harbor. A U-turn provision or additional access point between these two routes should be considered to improve circulation throughout the Nantasket area.

E. FACILITIES

The project area is served by town sewers and all major utilities. However, figures from the Massachusetts Water Supply Policy Study¹ suggest that the Hingham/Hull area will face a potential water deficiency by 1990. This projection is based on projected population growth for the Hingham/Hull area and current water supplies. The Hingham Water Company, drawing from local wells and Accord Pond, currently supplies all of Hull's water. For any development, this problem will always have to be kept in mind.

F. ENVIRONMENT

Preserving the environment in a community such as Hull is crucial to its potential. This not only is a limitation on development and a regulatory constraint but is a major factor in the ability of a resort and recreationally oriented community to capture a good share of its commercial markets. Several special concerns have been identified.

1. Barrier Beach

In August of 1980 Gov. King issued Executive Order Number 181, which severely limits development on designated barrier beaches. The town of Hull is one. Hull's designation affects development within the town, in varying degrees. However, environmental officials have suggested that within the two project areas, the barrier-beach designation (which the existence of the seawall may make academic) is less important than other environmental considerations, such as saltmarsh and shellfish protection. Ultimately, the

1. Massachusetts Water Supply Policy Study, Massachusetts Executive Office of Environmental Affairs, January 1977.

application of the barrier-beach designation and restrictions will be decided case by case as development plans emerge.

2. Flood Plain

According to a 1978 Flood Hazard Report² issued by the Department of Housing and Urban Development, virtually all of both project areas lie within a flood-hazard zone. Possible flooding ranges from destructive wave action to flooding and ponding in low-lying areas near the harbor. Within the project areas, only Bay Street was designated as outside the zone.

3. Sagamore Harbor

The parcel under consideration for development was completely cleared as part of the Hull Redevelopment Authority's urban-renewal effort. As Map 3 illustrates, the area contains the cleared parcels bounded by Nantasket Avenue, Bay Street, and Electric Avenue. The shoreline is covered by marsh grass and the shallow harbor contains productive clamflats.

Development of the site is limited by the small size of the land area; most construction plans will have to include dredging and filling. It is the necessity of moving (or destroying) saltmarsh or shellfish beds that has proved to be the stumbling block for the development of this site. Since state environmental standards require the relocation or replacement (equivalent size and quality) of saltmarsh or shellfish areas, development plans that do not entail dredging or filling are the most realistic.



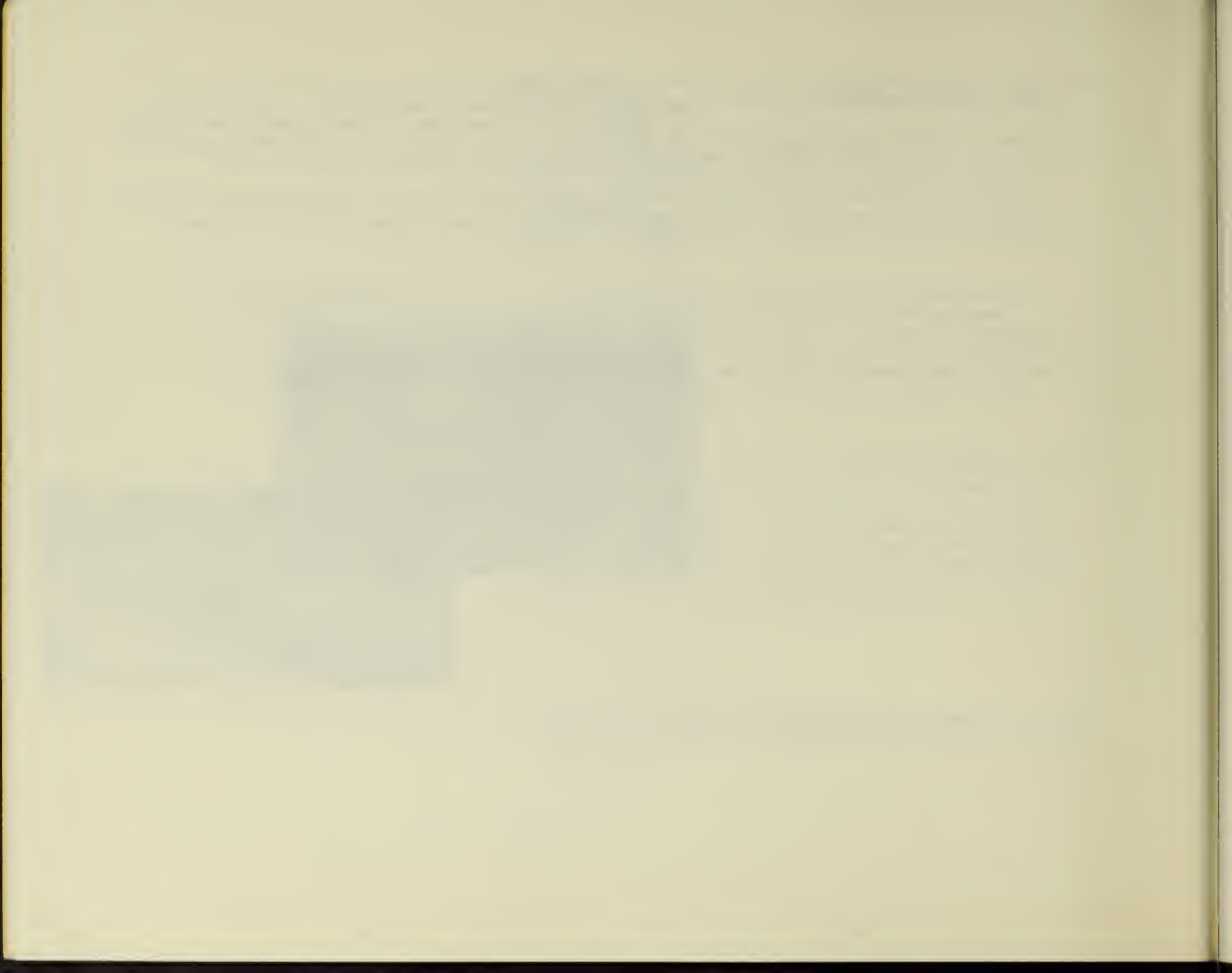
2. Flood Hazard Report, Town of Hull, Department of Housing and Urban Development, Federal Insurance Administration, August 1978.

4. Nantasket Harbor

Nantasket Harbor has productive shellfish beds and its perimeter contains areas of marsh grass. The clamflat on the northern side of the pier is open seasonally for digging. The southern side also contains a clamflat and, though less productive than the north side, is open year round.

Development in this area that requires dredging and/or filling will face the same problems present in Sagamore Harbor.





III. ECONOMIC ANALYSIS

Not surprisingly, Hull's location - a peninsula near a metropolitan area - has strongly influenced its development as a residential and recreational area. Hull's nearness to more-populated areas makes it relatively easy for its residents to work and shop elsewhere, yet difficult access to Hull limits its own ability to attract industry or commercial trade. Its miles of beach and the Paragon Park amusement center, however, do make it a popular resort. An estimated 30,000 people a day visit Hull during the summer.

A. SOCIOECONOMIC PROFILE

As Table 1 shows, population growth in Hull has lagged behind that of neighboring communities. According to the 1980 US Census, Hull lost population between 1970 and 1980. It has an estimated 247 fewer people than a decade ago, a decline of 2.5 percent. By contrast, the greater-Hull area experienced a 2.7 percent increase in population.

TABLE 1: POPULATION TRENDS

Year	Greater Hull*	Hull	Percentage of Greater Hull
1970	90,370	9961	11.0%
1980	92,828	9714	10.5%
# Change	+ 2458	-247	-
% Change	+ 2.7%	-2.5%	---

* Greater Hull = Cohasset, Hingham, Hull, and Weymouth.

Per-capita-income in Hull also did not keep pace with area trends. Table 2, which compares per-capita-income in Hull to that of the surrounding area, shows Hull well below the average both in absolute terms and in rate of growth.

TABLE 2: INCOME TRENDS

Per-Capita Income	Greater Hull	Hull
1969	\$3897	\$3034
1977	\$6848	\$5278
Change 1969-1977	\$2948	\$2244
Rate of Growth 1969-1977	75.6%	66.7%

* Greater Hull: Cohasset, Hingham, Hull, and Weymouth.

Sources: "Current Population Reports: Population Estimates and Projections," Department of Commerce, Bureau of the Census (January 1980). Consumer Price Index: Urban Wage and Clerical Workers (CPI-W), Boston, MA," US Department of Labor, Bureau of Labor Statistics (1981).

Employment in Hull has increased in recent years, but again, Hull's growth has not been great when compared with that of surrounding towns. This is due mostly to the type of employment found in Hull. As can be seen in Table 3 the majority of jobs in Hull are in the Trade and Services sectors. While these are the areas in which much of the South Shore's employment growth occurred during the '70s, strong gains also were made in manufacturing in which Hull offers virtually no jobs. Employment in manufacturing grew most rapidly in towns where the so-called "high-technology" firms expanded. Most of these firms, of course, have located along major transportation corridors like Route 128 and in more-suburban industrial parks. Hull's location and dense development naturally limit its ability to attract this type of industry.

TABLE 3: EMPLOYMENT IN HULL

Sector	Number of Employees			Percent of Total 1978
	1970	1975	1978	
Agriculture	3	12	17	2.5%
Mining	0	0	0	
Construction	37	18	88	13.0%
Manufacturing	0	*(D)	(D)	(D)
Utilities	75	93	35	5.2%
Trade	285	334	369	54.7%
Finance	15	25	35	5.2%
Services	<u>229</u>	<u>213</u>	<u>129</u>	<u>19.1%</u>
TOTAL	644	696	675	-

*(D) = Disclosure laws prohibit publishing this information.
There are fewer than four manufacturing firms in Hull.

Source: Massachusetts Division of Employment Security, 1981.

1. Trade includes both wholesale and retail business.
2. Services include businesses that provide a service to individuals and businesses such as hotels, beauty and barber shops, medical and legal services, amusement services and education services.
3. Manufacturing includes businesses that make or assemble products, usually by machine.

Table 4 illustrates employment trends. While greater Hull experienced a 46.5 percent increase in total employment between 1970 and 1978, employment in Hull rose by only 4.8 percent. Jobs in manufacturing made no gains, while in the surrounding area they rose by 52.2 percent. Employment in services, a sector marked by rapid growth during the '70s, fell in Hull, while increases were recorded in other South Shore communities.

TABLE 4: EMPLOYMENT TRENDS IN GREATER HULL - 1970 to 1978

Sector	Greater Hull*		Hull	
	#Change	%Change	#Change	%Change
Agriculture	- 2	- 1.1%	+ 14	+ 466.7%
Mining	- 5	- 19.2%	0	0
Construction	+ 32	+ 3.6%	+ 51	+ 137.9%
Manufacturing	+1006	+ 52.2%	---	---
Utilities	+ 19	+ 2.3%	- 40	53.3%
Trade	+1842	+ 34.4%	+ 84	+ 29.5%
Finance	+ 326	+ 86.7%	+ 120	+ 133.3%
Services	+2266	+102.6%	- 100	- 43.7%
TOTAL	+5484	+ 46.5	+ 31	+ 4.8%

*Greater Hull: Cohasset, Hingham, Hull and Weymouth.

Source: Massachusetts Division of Employment Security, 1981.

These population, per-capita-income, and employment statistics show how weak Hull's economy has been in recent years. To reverse this trend, Hull needs to identify its market strengths and begin to revitalize its economic base accordingly.

B. EXISTING MARKET CONDITIONS

The most promising development location, the Nantasket Pier area, is a mixture of commercial and recreational uses, as noted. This part of Hull has been a tourist attraction since the late 1800s, when train and ferry lines brought thousands of visitors to Nantasket Beach each summer. As the automobile became more common, train and ferry service to Hull declined, and both the nature of tourism and the appearance of Nantasket Beach changed markedly. Cars necessitated roads and parking lots, and enabled visitors to make shorter visits; railroad lines were gradually removed.

Today, Paragon Park, built in 1863, is the predominant economic force in the area and is Hull's largest source of tax revenue. Nantasket Beach, under the management of the MDC since 1899, continues to attract thousands of summer visitors, who patronize Paragon Park and the many commercial establishments along Nantasket Avenue. None of the large old hotels that flourished at the turn of the century now exist ; the typical visitor stays only for the day. The Pier area, badly deteriorated, supports little commercial activity.

The Sagamore Harbor area has been completely cleared, as a part of the community's redevelopment program. In this condition there are few limitations on development but, similarly, there are few attractions for new development. For the most part, our assessment of local market conditions (except as noted) applies to both areas.

1. Office/Industrial

As indicated, there is little industry in Hull and none in the project area. Professional offices also are rare. The recreational nature of the area and its limited highway access make it a poor location for office or industry.

2. Retail and Services

According to the US Bureau of the Census, which tracks business trends by community, ³ retail sales (when adjusted for inflation) in Hull between 1972 and 1977 were down by 12.5 percent, or more than \$1.5 million. ⁴ The number of establishments reported decreased by 21 percent.

3 US Census of Retail Trade, Bureau of the Census, Washington, DC (1972 & 1977).

4 Dollars adjusted for inflation

TABLE 5: RETAIL TRENDS IN HULL BETWEEN 1972 AND 1977

Business Group	Change in # of Establishments	Change in Sales(\$1000)	%Change in Sales
Hardware	+ 1	*(D)	(D)
General Merchandise	0	(D)	(D)
Food and Liquor	+ 2	- 24	-1.0%
Apparel and Accessories	- 3	(D)	(D)
Furniture and Appliances	- 1	(D)	(D)
Eating and Drinking	+ 1	+ 28	+1.0%
Drugs	- 2	(D)	(D)
Miscellaneous Retail ¹	-19	-607	-32.6%
TOTAL	-23	-1576	-12.5%

* (D) = Disclosure laws prohibit publishing this information.

Source: US Census of Retail Trade, Bureau of the Census,
Washington, DC (1972 and 1977).

1. "Miscellaneous Retail" includes retail establishments not elsewhere classified, such as sporting goods, book and stationery stores, florists and jewelers.

Between 1977 and 1972, services in Hull also declined in number by 12 percent and sales were off 20 percent. As Table 6 shows, business receipts (when adjusted for inflation) were down in all categories reported.

TABLE 6: SERVICE TRENDS IN HULL

<u>TOTAL</u>	<u>1972*</u>	<u>1977</u>	<u>Change</u>
Number	65	58	- 7 (-12%)
Receipts(\$1000)	\$3050	\$2425	-\$625 (-20%)
Hotels, Motels, Camps			
Number	4	1	- 3
Receipts(\$6000)	\$ 59	** (D)	---
Automotive			
Number	2	1	- 1
Receipts(\$6000)	(D)	(D)	---
Miscellaneous Repair			
Number	8	4	- 4
Receipts(\$6000)	\$ 154	\$ 157	\$ + 3
Amusement Recreation			
Number	14	13	- 1
Receipts(\$6000)	\$2074	\$1665	\$ -409
Legal Services			
Number	6	6	6
Receipts(\$6000)	\$ 108	\$ 76	\$ - 32

* 1972 dollars have been adjusted for inflation; 1972 dollar here = 1977 dollar.

** (D) = Disclosure laws prohibit publishing this information.

Source: Census of Service Industries, Bureau of the Census, Washington, DC (1972 and 1977).

According to the Census, there were fewer hotels and motels operating in the Boston Standard Metropolitan Statistical Area (SMSA) in 1977 than in 1972. Hotels reported during this period dropped by nearly 13 percent, with the number of motels falling by 29 percent. While statistics are not available by city and town, it is apparent that the lodging industry in Hull has followed the regional trend. The gas shortages of the '70s are thought to be responsible for decline in business.

The Census does not provide specific information on individual commercial centers within a community, but MAPC's inventory of stores in Hull estimated that nearly 40 percent of all retail establishments are in the Nantasket area. Of these, 65 percent are tourist-related. Since Nantasket is supported almost entirely by non-residents, its commercial area is not typical of most community shopping areas. Therefore, its potential market capture for retail goods is not high. In fact, a shoppers' survey done by the Hull Office of Community Development⁵ showed that only two percent of those interviewed in the project area were shopping.

Retail mix, which refers to the number and types of businesses that make up a commercial district, is an important factor to consider when examining a market area. Local business districts that contain a greater variety of goods and services attract a more diverse and thus a larger group of patrons. Table 7 shows the existing retail mix in the project area. While there is a fairly even split between the retail and service categories, there is, again, an exceptionally large concentration of eating and drinking establishments and amusement services.

5. "Shopping and Visiting in Hull: Who's Doing What and Where," Office of Community Development, Hull, MA (February 1980).

TABLE 7: INVENTORY OF COMMERCIAL USES: NANTASKET PIER AREA

CATEGORY	NUMBER OF BUSINESSES	PERCENT OF TOTAL
<u>Retail</u>		
Apparel/Accessories	0	0
Drug Stores	1	2.0%
Hardware/Building Supplies	1	2.0%
Furniture/Appliances	0	0
Food and Liquor	3	5.9%
General Merchandise ¹	0	0
Eating and Drinking	22	43.1%
Miscellaneous Retail ²	0	0
Sub-Total	27	53.0%
<u>Services</u>		
Automotive	2	3.9%
Personal Services ³	1	2.0%
Professional Services ⁴	4	7.8%
Amusement ⁵	13	25.5%
Hotel/Motel	2	3.9%
Sub-Total	22	43.1%
<u>Other</u>		
Vacant Storefronts	2	3.9%
TOTAL	51	100%

1. General Merchandise includes retail stores that sell a number of lines of merchandise, such as dry goods, apparel, furniture, hardware, and food. Department stores are also included in this group.
2. Miscellaneous Retail includes retail establishments not elsewhere classified, such as sporting goods, book and stationery stores, florists, and jewelers.
3. Personal Services includes establishments primarily providing care of a person or his/her apparel, such as beauty and barber shops, dry cleaning, and laundry.
4. Professional Services includes establishments providing services to businesses or individuals by fee or contract, such as doctors, lawyers, and finance and insurance brokers.

3. Tourism

A 1979 memo prepared for the Hull Board of Selectmen noted that of the \$9.7 million in sales generated annually, an estimated \$5 million are generated by day visitors and \$1.6 million by summer residents. It also stated that hundreds of jobs are created by tourism.⁶ Clearly, recreation and amusement are the important and vital part of Hull's economy and most growth opportunities are within these areas.

Results of the "Hull Shoppers' Survey"⁷ showed that 82 percent of those interviewed at Nantasket Beach were not residents. The heaviest concentration of visitors (almost half) came from Boston, Quincy, Weymouth, and Hingham. A full 97 percent had been to Nantasket before and 91 percent were staying for only one day. Nearly half were visiting the amusement park and a third the beach. The visual and physical predominance of Paragon Park, the beach, and the pier at the entrance of town make them important economic factors in the project area. Paragon Park is Hull's strongest business and its largest tourist attraction. Other commercial establishments in the area depend on Paragon Park and the beach to attract customers. The economic strength and popularity of these areas therefore is critical to any discussion of market potentials.

Statistics summarized in the chart below indicate the importance of the tourism to Hull's economy. Recreation and amusement are Hull's greatest market assets and could strengthen the local economy if expanded.

6. "Memo; Report on Impact of Alternative Six", Judeth Weirs (November 1979).

7. "Shopping and Visiting in Hull", Hull Community Development Department (February 1979).

TABLE 8: SUMMARY OF SHOPPER-SURVEY RESPONSES IN NANTASKET
BEACH AREA⁸

<u>Hull Resident</u>		<u>Attributes of Hull</u>	
Yes	18%	Good Access	4%
No	82%	Beach	23%
<u>Method of Transit (Non-Residents)</u>		Activities	1%
		Scenery	8%
		Other	15%
		<u>Activities While in Hull</u>	
Car	67%	Shopping	2%
Bus	26%	Dining	15%
Other	7%	Beach	32%
<u>First-Time Visitors</u>		Pleasure Ride	13%
Yes	3%	Amusement Park	49%
No	97%	Walking	25%
<u>Length of Stay</u>		Working	11%
		Friends	7%
		Drinking	11%
		Other	20%
1 Day	91%		
2 Days to			
2 Weeks	3%		
More than			
2 Weeks	6%		

4. Commercial Fishing

The fishing industry in Hull is small compared with that of ports like Gloucester, New Bedford, Provincetown, and Boston. Indeed, a 1977 report by the Massachusetts Port Authority⁹ (Massport) noted Cohasset and Scituate as fishing ports without mentioning Hull. With a fleet of 30 boats in the summer and 12-15 in winter, Hull's fishermen and the Hull Fishermen's Association currently account for a small part of its economy and employment picture.

⁸. Ibid.

⁹. The Fishing Industry in Massachusetts, Massachusetts Port Authority, November, 1977.

The potential for growth in commercial fishing in Hull is improving. The Massport study cites the major problem faced by commercial fishing boats in small harbors as competition with recreational boats, especially during the summer. The reconstruction plan for Pemberton Pier in Hull, which includes separate docking facilities for commercial boats, will offer local fishermen some advantage over nearby harbors. The elimination of conflicts between recreational and commercial vessels creates an opportunity for expansion of Hull's commercial fleet.

Pemberton Pier should be the primary dock for Hull's fishermen. Nantasket Pier is unusable during the winter because of ice. In the summer, it could serve as a haven from summer storms, but proposed tourist use will be incompatible with regular use by commercial fishermen. Offloading activities, fish storage/packing, and the sights and smells associated with commercial fishing would severely limit Nantasket Pier's ability to act as an attractive marina, ferry landing, or commercial/recreational site.

IV. DESIGN ANALYSIS

In addition to land use and economic factors, the layout and design of a project area affects development potential. Business decline, traffic congestion and poor community image often can be linked to design problems. The look of buildings, signs and landscaping in an area can be as influential as employment or population characteristics.

Four design categories needing improvement have been identified for the project area: buildings and signs, pedestrian circulation, landscaping and maintenance.

A. Buildings and Signs

Commercial areas exert great influence through their buildings and signs. Well maintained buildings and well-designed signs encourage shoppers and visitors; neglected buildings and/or unappealing signs project an image that often results in business decline. Paragon Park and the arcade/boardwalk are especially influential in creating the image of the project area. While we fully recognize the need for attention-getting signs in an amusement area, it is recommended that the town's sign ordinance be re-written and enforced.

Current trends in leisure time development emphasize architectural authenticity and atmosphere rather than attention getting devices (e.g. Boston's Quincy Market and the trend to "theme" amusement parks nationwide). Control of the size, number, and design of signs will improve the look of the area and lessen the current atmosphere which many find offensive. Many of the unique older buildings in this area are hidden behind three or four signs, all advertising the same thing. The amusement park atmosphere can be enhanced by reducing the confusion of multiple signs and increasing the view of older, beachfront architecture. The project area contains a number of buildings that would benefit greatly from renovation. Removal of false facades and other such inappropriate additions would result in more attractive individual buildings and an improved image overall.



B. Landscaping

Trees and shrubs in any area add color, texture, screening, and shade. In a coastal setting like the project area, trees and shrubs also soften the sometimes bleak landscape. At several locations within the project area trees and/or shrubs would greatly improve the image.

Along Nantasket Avenue, both on the beach side and in areas along the arcade, plantings would provide both shade and screening of sidewalks, parking lots, picnic areas, and playgrounds. Beside the MDC parking areas on George Washington Boulevard, more-effective use of trees and shrubs would screen the area from the road and provide shaded parking for lot users.

Care should be taken to select plantings suited to the windy, salty climate and sandy soil. Several appropriate types of trees, evergreen and deciduous, are available, e.g., Japanese Black Pine, Pitch Pine, and Little-Leaf Linden. The trees and shrubs chosen should also be disease-resistant and as maintenance-free as possible. The ultimate height and spread of the plant, coloration, and any seasonal changes should be considered, too.

C. Pedestrian Circulation

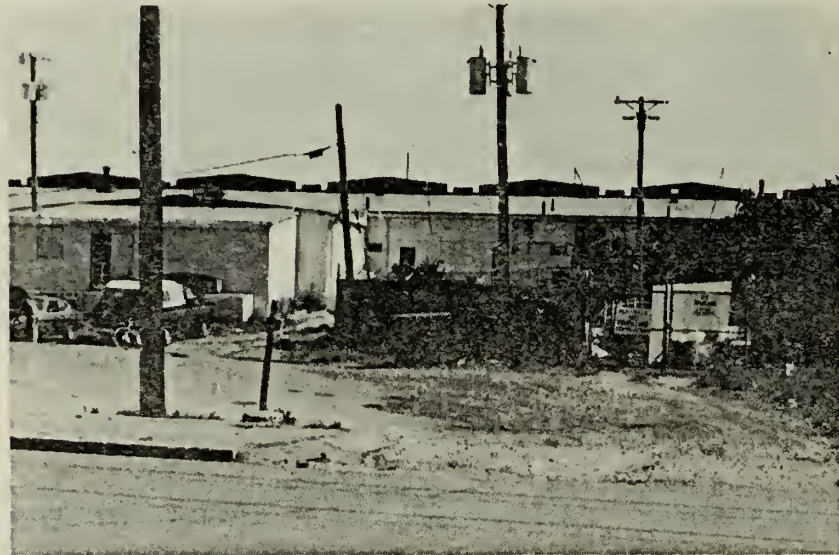
Nantasket Beach and Paragon Park are directly across Nantasket Avenue from each other, but some sections of the project area are not so accessible to the pedestrian. The commercial area to the north and especially Nantasket Pier are not readily visible from these two main attractions. Pedestrian connections among all sections of the project area should be encouraged by attractive sidewalks and signs. This is especially true in light of the reconstruction plans for Nantasket Pier. An improved pier should encourage summer ferry service and result in a greater number of pedestrians walking to the beach and amusement park from it. Pedestrian crossings, informative signs, bulletin boards, and clear pathways to the major activities should be provided.

Finally, amenities such as benches, shade trees, awnings, and attractive signs, will encourage visitors to use the entire project area, visiting amusements, the beach, the commercial area, and the pier. This can be an entire recreational area, without the current emphasis on one or two attractions.

D. Maintenance

As was pointed out in the previous section, the Nantasket area currently focuses on the oceanside attractions at the expense of the bayside pier and the commercial area to the north. This has resulted in poor building maintenance along George Washington Boulevard. Although the boulevard is the major entrance to Hull, its appearance as "the back door to Hull" results from the view of the unmaintained backs of buildings along Nantasket Avenue. While simple maintenance (painting, yard clean-up, etc.) would improve the area, some landscaping would encourage the development of this area into a working component of the project area.

The tree plantings suggested for Nantasket Avenue and the MDC parking areas could extend the length of George Washington Boulevard. Small picnic areas could take advantage of the harbor view and also provide an attractive first view for ferry users.



V. MARKET POTENTIALS

To determine possible areas of growth in the project area, it is necessary to understand those characteristics that influence and shape the existing market structure. From previous sections of this report, certain factors emerge:

1. Hull's seaside location makes tourism its most profitable summer industry but seriously limits its ability to attract non-tourist-related business. Its economy thus is subject to seasonal variations. Hull is both smaller and poorer than surrounding communities.
2. Within its market area, Hull's amusement industry has no significant competition. Its retail-trade sector, however, faces a great deal of competition, particularly for comparison and specialty goods. So does its marina.
3. The existing retail mix of the project area is unbalanced by the concentration of amusement and eating and drinking establishments.
4. Negative design factors include unattractive storefronts, inconsistent signage, poor landscaping, and a lack of aesthetic unity within the project area.
5. Shopper surveys indicate that the project area is primarily a tourist center and that most visitors stay only for the day.
6. Retail trade in Hull declined in recent years, both in sales and in number of businesses. Population also fell and growth in employment lagged behind the surrounding area.

When discussing market potentials, it is important to bear in mind those six factors.

A. OFFICE/INDUSTRIAL

As noted, the recreational nature of the Nantasket area and its limited highway access make it a poor location for office or industry. Potential for expansion in this area is low.

B. RETAIL AND SERVICES

As discussed, trade in the project area is almost exclusively tourist-related; little "shopping" occurs. Commercial establishments are predominantly restaurants, lounges, and amusements, and any potential for broadening this mix, it must be remembered, is limited by Hull's small year-round population (approximately 9700), its geographic location, and its seasonal customer base. In addition, existing retail centers in Hull supply most goods and services needed by the resident population, particularly convenience items.

1. Specialty Retail

Proposals to broaden Hull's retail base by adding "specialty" shops along Nantasket Pier have been made. This includes bookstores, jewelers, hobby and craft shops, gift and souvenir stores, and art galleries - stores commonly found in resort areas but lacking in Hull.

While there is no standard set of criteria for specialty-retail development, such developments tend to share certain features. Usually they offer higher-priced goods and cater to middle- and upper-income shoppers. Architecture and landscaping often are elaborate. Many locate close to regional malls to benefit from their drawing power, or in a high-income area, or in a section with high geographic or amusement potential.¹⁰ Commercial centers in Hingham and Cohasset, relatively high per-capita-income towns, have many specialty shops and already capture much of the local market share although they are not specialty centers exclusively.

Rockport and Newburyport are examples of tourist-oriented specialty-retail centers and are, like Hull, popular summer resorts. Specialty shops are not the attraction to these areas, however; they rely on customer spinoff from other nearby activities. Historic streets, buildings, and waterfronts draw people to Rockport and

¹⁰. Information from "Its Risky and Expensive, But Developing a Specialty Center May be Worth It," Shopping Center World, March, 1979.

Newburyport, and shopping is a logical aside for most visitors. It is important to understand however, that specialty retail is not automatically successful even under good conditions. Information available from the Salem Planning Department indicates that specialty retail at Pickering Wharf is not as strong as expected. Despite the wide variety of attractions in Salem, it has taken a couple of years to sort out the specialty retail businesses that are viable from those that are not.

Tourists in Hull do not come for the same reasons that others go to Rockport, Newburyport and Salem. Visits to Nantasket are recreational: people come to the beach and the amusement park and typically spend money on food, drink, and entertainment. Consumers drawn by water slides, roller coasters, and arcades are not likely to frequent bookstores or boutiques in the same trip.

Specialty retail development, then, is unlikely to occur under current conditions. Competition from surrounding towns, the current attractions in the Nantasket area, and the type of visits made to the area are all contrary to the conditions necessary for this development.

2. Eating and Drinking

As noted, the project area has a concentration of restaurants, lounges, and snack bars, and despite their number, there is little difference in quality among them. This proliferation of restaurants and bars has a negative influence on the project area, as it limits growth within the category and hinders a more-balanced development.

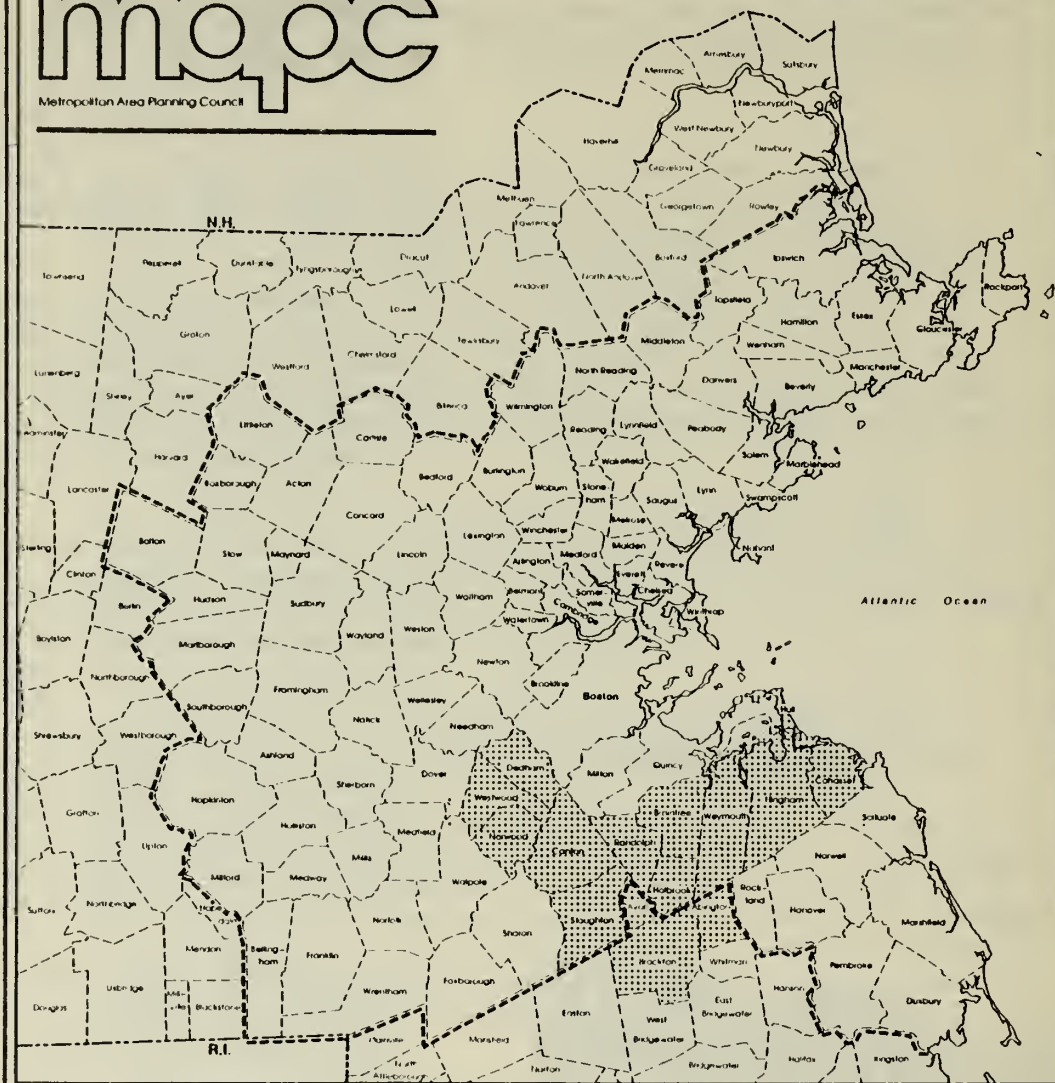
Proposals have been made for an additional restaurant at Nantasket Pier when it is reconstructed. Unlike specialty-retail establishments, which rely on other attractions or accessibility to gain market support, restaurants are more or less independent. The success of an eating-and-drinking establishment depends far less on how that business complements activities in an area than on the quality and attractiveness of what it provides. A new restaurant usually will succeed or fail on its own.

The planned renovation of Nantasket Pier and the possibility of an expanded marina there present an



mapc

Metropolitan Area Planning Council



Scale in Miles



MARINA MARKET AREA

--- MAPC boundary



Drawn: September, 1978.

opportunity for additional restaurant sales. This potential could be realized through either the expansion of an existing restaurant or the development of a new one. It is important to remember, however, that the market is already saturated with restaurants and bars, so the size and success of any additional facility at Nantasket Pier depends not only on its ability to offer an attractive and competitive dining alternative but also on the success of other business expansions at the pier.

C. TOURISM

1. Marina Development

Map 7 defines the Hull market area for marinas. Hull's location on the eastern side of Hingham Bay effectively forms a barrier between Nantasket Harbor and most coastal towns to the south, except Cohasset, which borders Hull. To the north, the market area ends at Hough's Neck, in Quincy. Its western boundary roughly follows Route 128 and extends as far inland as Westwood and Brockton.

Excluding yacht clubs, there are approximately 275 moorings and 1200 slips available at 14 locations within the market area. Of these, approximately 135 moorings and 140 slips are at Hull's five small marinas.¹¹

Statistics on boats in the market area indicate that currently over 9500 are registered.¹² Given that there are only 1200 slips in the same area, these figures suggest that more than 8000 boats are docked at yacht clubs, unsuited for marina or ocean use, or unserved. Currently, boats on marina waiting lists in the Hull area exceed 300. It appears that a 200-300-boat marina is supportable in Hull.

Unlike specialty-retail development, an expanded marina facility at Nantasket Pier would not be dependent on the popularity of the project area - it would draw from its own customer base. Indeed, a marina is likely to generate additional visitors and serve to revitalize the pier area.

¹¹. Information from Boating Almanac

¹². US Coast Guard Statistics

If it were successful, customer spinoff could add support to other businesses, such as a boat shop or restaurant. The integration of a marina with other commercial, recreational, and transportation (commuter-boat) uses through good marketing, landscaping, and design would make the pier an important economic asset to the area.

The development of a marina at this location, however, ultimately depends on suitable construction conditions. High construction costs, such as those encountered at Sagamore Harbor, would make building a marina financially unattractive. There are similar geologic conditions in the Nantasket and Sagamore areas, so it is possible that similar barriers to construction will be encountered.

2. Lodging

According to a report on the hotel industry,¹³ the greater-Boston lodging market had a very good year in 1979, with increases over 1978 levels in every major revenue-producing department. Demand from conventions currently is only a little behind that from business visitors. More and more tourists also are visiting Boston - between 1975 and 1979 the number rose nine percent annually - and many of these were foreigners. While Laventhol and Horwath forecast future demand for hotel rooms in the Boston area to be strong, they note that currently there are 20 hotels and additions to existing facilities proposed, that only half have a high probability of completion, and that most will cater to businessmen, convention delegates, and tourists in Boston proper.

Hull's lodging industry was once strong but declined with the automobile. Because Hull is an easy day trip from Boston, residents and visitors to the metropolitan area tend not to stay in Hull for more than a day. Its problems of access also keep hotels and motels from attracting those businessmen or tourists who might like to use Hull as a base from which to explore other areas of Massachusetts.

¹³ US Lodging Industry 1980: Laventhol and Horwath, Philadelphia, 1980.

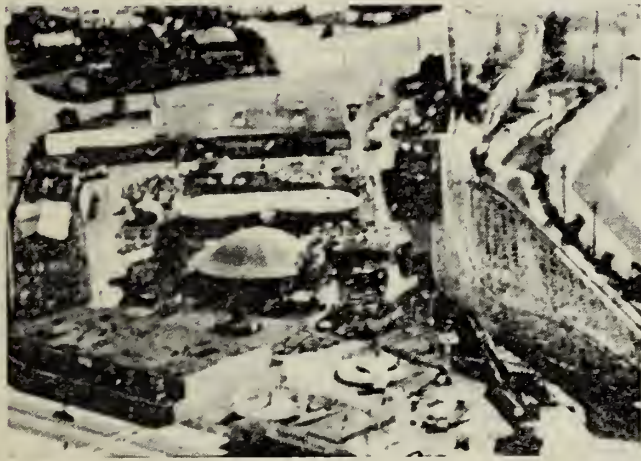
Any potential for hotel or motel development in the project area, therefore, is dependent on the demand generated by facilities in the Nantasket area. Current facilities could not support new motel or hotel development. Although marina development and upgrading of the Nantasket Pier and Paragon Park could generate enough demand to support a small establishment, major hotel or motel development is highly unlikely within the project area.

3. Amusement

It is important that Nantasket's largest business - Paragon Park - not be forgotten in any revitalization scheme. Its potential for market improvement is good: Paragon Park has no major competitors within its trade area¹⁴ and has been well-maintained over the years.

Paragon Park dates back to the late 1800s and is small compared with more-modern amusement centers. Unlike large parks, small amusement areas are far less demanding of space, utilities, and highway interchanges, and can fit into odd-shaped configurations. Typically, they need to be near another major tourist attraction in order to survive; Paragon Park, for example, benefits from Nantasket Beach.

Theme parks¹⁵, a relatively recent addition to the recreational field, are an offshoot of more traditional amusement parks. Such a park has a specially created environment where architecture and design produce a unique setting. Generally, these parks are for entertainment and relaxation, are family-oriented, and have their peak season in summer. Although the selection of the theme and its development must be carefully coordinated between public and private interests, turn-of-the-century Nantasket itself seems both likely and promising. By building directly on



14. The primary market area for an amusement park is considered to be within a 50-mile range or a 1-hour drive.

15. Information on theme park development is taken from Recreational Development Handbook, Urban Land Institute, Washington, D.C., 1981.

existing and historic facilities, attractions may be enhanced with a minimum of effort and a maximum of attention to current trends in leisure-time markets.

While there is currently little room for Paragon Park to expand, renovations along Nantasket Avenue and at Nantasket Pier could tie into any changeover to an amusement-park theme. New water-related attractions have been built in several states and are becoming more popular as people become more interested in active recreation. The slide at Nantasket Beach is an example.

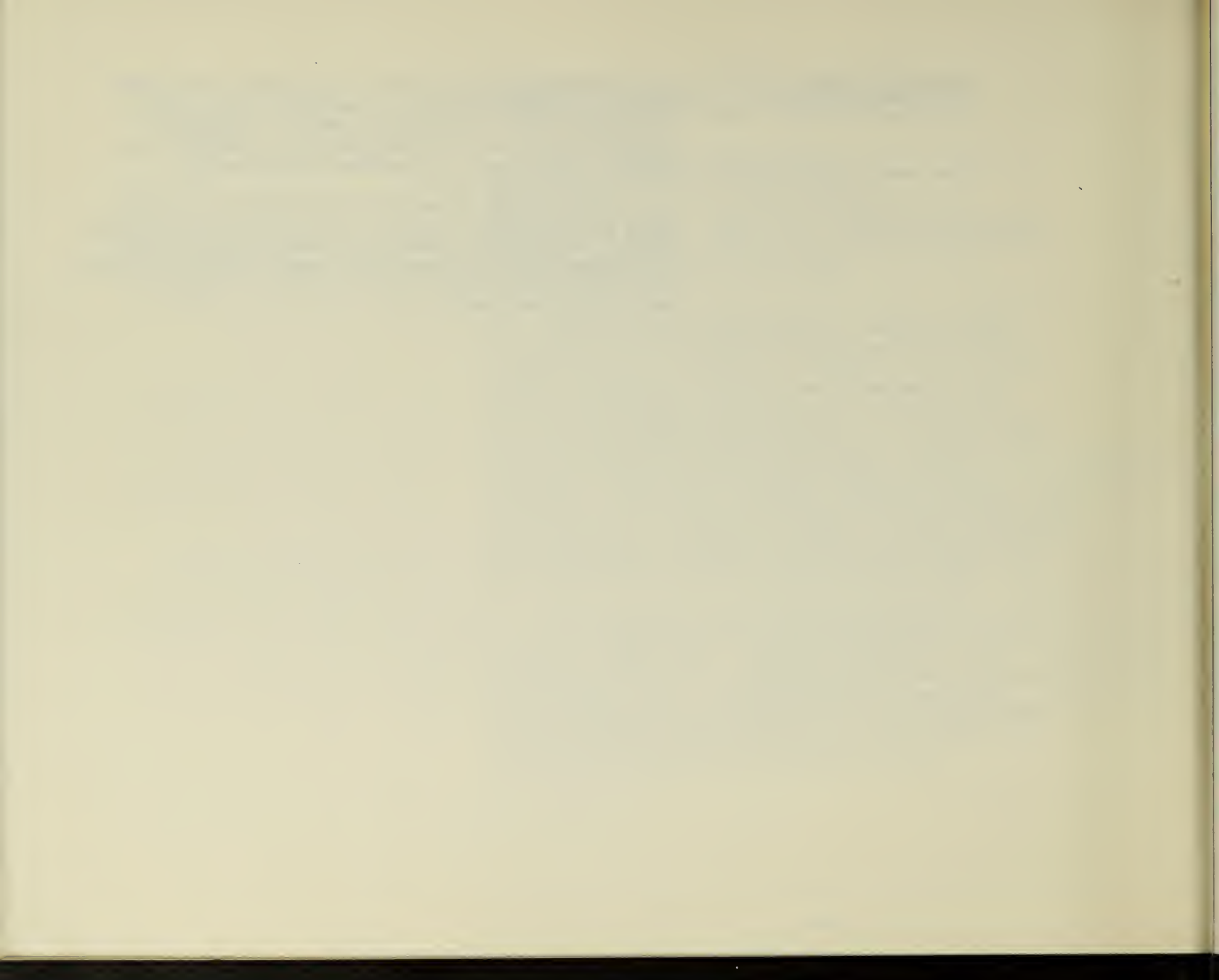
An amusement park should offer a variety of things to do. Experience shows that continually adding new family attractions that are both entertaining and educational to a theme park or its periphery is important to its success. Nantasket already has the beach and an amusement park with rides. As businesses along Nantasket Avenue turn over, Hull could encourage theme development by formulating and adopting design guidelines for the area. An exhibits area at the pier could also feature educational programs or displays that focus on Hull's water-related ecology and businesses. The fishing industry, water transportation, and barrier beaches are examples of topics. Changing attractions or exhibits gives visitors an incentive for returning each year and broadens the appeal of a facility. Advertising and promotion of the park must also stay aggressive.

It is important to other commercial businesses in the area that Paragon Park remain an active venture. It provides a stable base. Expansion, if controlled and designed, could improve the overall quality and appearance of the project area. If coordinated with a marina and other renovations along Nantasket Pier, additional recreation-oriented businesses in the project area that broaden the existing retail mix would be beneficial to Hull.

D. COMMERCIAL FISHING

As discussed, the potential for growth in the fishing industry is good in Hull but is expected to occur mostly at Pemberton Pier. Pemberton currently is undergoing renovations to make it more desirable for fishermen. In addition, Pemberton is a year-round docking facility.

Since Nantasket Harbor ices in the winter, this area could best serve the industry as a safe harbor during summer storms. As mentioned, commercial fishing facilities are not recommended for Nantasket Pier because they would conflict with ferry operations and potential marina or commercial recreational development.



VI. RECOMMENDATIONS

Although Hull's current conditions and market potentials limit the development possibilities for either project area, MAPC's analysis produces several recommendations. Expansion of marina space is the only new development that can be recommended at this time, but other actions can be taken to improve the climate for development. The following sections outline recommendations for each project area and implementation strategies for the proposed actions. Map 8 indicates the actions recommended for Nantasket Harbor.

NANTASKET HARBOR

A. CARD Designation

In order to create a better climate for development in the Nantasket Pier area, MAPC recommends that the town seek designation of the area as a Commercial Area Revitalization District (CARD). Designation under this state-administered program would allow commercial establishments in the area to be eligible for financial incentives such as tax exempt revenue bonds, mortgage insurance, and tax credits. In addition, an off-street parking program also provides funds for facilities within CARDS.

The program requires and application through the Executive Office of Communities and Development (EOCD) outlining an overall plan for the area including economic, employment, and land use information. Designation will improve opportunities for investment and serve as an indication of Hull's commitment to revitalization.

B. Signs

As the Design Analysis section illustrates, several locations within the Nantasket Harbor area would benefit from better design and maintenance. An important step in insuring that some of these changes occur and remain is the adoption and enforcement of a comprehensive sign ordinance. MAPC recommends that the town rewrite its current sign ordinance to include the following measures:

1. control of the size, number and placement of signs;
2. control of the allowable coverage of window signs;
3. provisions for the removal of nonconforming signs;

In general, MAPC recommends that Hull's sign ordinance control the towns signage on the basis of design as well as construction standards. The beneficial effects of controlled signage should not be underestimated. Business activity, range of customers, and civic pride are all affected by the visual and physical character of commercial areas.

Any changes in Hull's existing sign ordinance will have to be approved by several town boards and ultimately, town meeting. It then falls to the initiators to publicize the benefits of design improvements and sign changes. Recent examples of good signs and design can be used in comparisons with existing design and signs, to demonstrate that good design and signage can improve the appearance and atmosphere surrounding Nantasket Harbor's predominant commercial activities.

Implementation will depend on a strong effort by the board of selectmen or the planning board, to publicize and support the efforts and benefits associated with a sign ordinance.

C. Zoning Change

A third action which MAPC recommends is to re-zone the Nantasket Pier. Currently zoned as Public Open Space, the pier should be designated as Commercial Recreation - A, connecting two similarly zoned parcels on either side.

This action would accomplish several things. First, it would clearly indicate the town's desire to develop the pier for commercial activities.

Second, it would allow the town to lease portions of the pier for commercial uses. Although parts of the pier are currently leased, as these leases expire renewal could be challenged on the grounds that the pier is public open space. If the pier were designated as a commercial area, the town would be free to lease some areas, and maintain others for public use.

Third, should the town decide to sell the pier, commercial zoning would be much more attractive to developers. Caution would be necessary in this case to avoid a private

owner from denying public access to the waterfront, but an access easement could be retained, providing both private development and public access.

D. MDC Beach-area Improvements



MDC's control of a major portion of the project area will greatly affect the opportunities and climate for new development. MAPC believes that improvements could be made to the beach and surrounding MDC areas that will provide a better balance of automobiles and pedestrian-oriented amenities. It is the Council's recommendation that the town of Hull and the MDC cooperate in developing plans along these lines that will ultimately broaden the appeal of the entire area.

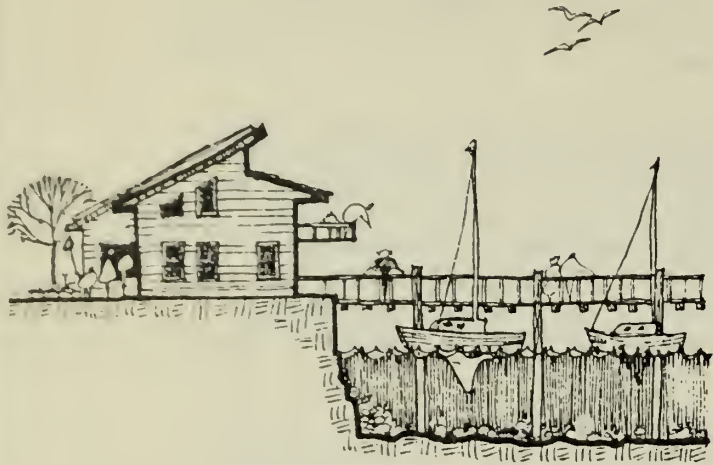
Specifically, plans should be developed to relocate parking away from the seawall and replace it with sitting areas for beach users. Plans should also be formulated to improve pedestrian access to and from Nantasket Pier, to provide more open space for recreational activities, and to provide a system of signs for tourists.

Implementation of this will require the town and MDC to cooperate in determining suitable sites for the desired improvements.

E. Marina Development

The Council's recommendation for marina development at Nantasket Pier represents a shift in the original study plans. Marina development has long been focused on Sagamore Harbor, and the MAPC study of feasibility maintained this orientation at the outset. However, significant differences between the two harbor sites became apparent as land uses and physical conditions were studied. The results indicated that the Nantasket Pier area was clearly superior for marina development, so the focus of MAPC's study shifted away from Sagamore Harbor.

Specific plans for an expanded marina at Nantasket Pier have not been developed. It is envisioned that the north side of the Pier, would probably be more favorable, possibly using the vacant parcel at the end of George Washington Boulevard. Support services and businesses could be located on the reconstructed pier, and at existing locations. Parking



for marina users could be provided on filled land along George Washington Boulevard or at existing sites.

As with the urban-renewal parcel, marina development can be a public endeavor, or the site can be sold or leased for private development. MAPC recommends that the town negotiate the sale or lease of property necessary for private marina development. At a public meeting last fall of the Hull Redevelopment Authority, a spokesman for a private marina-development firm stressed the importance of a profitable location and development plan.

MAPC recommends Hull actively market the pier as a marina site. While private developers would be responsible for developing financial information regarding marina viability, the town should compile such fundamental information as dimensions, usable space, and lease or sale requirements. If the property is sold, the town must also facilitate necessary zoning changes to allow development.

Implementation of marina-development plans, then, rests on the ability of the town to attract developers through active marketing.

F. Paragon Park

Although marina development, beach area improvements, and improved design may be achievable on their own, the success of any revitalization effort is strongly linked to the condition of Paragon Park. The continued success of the park is a necessary component for strengthening commercial/recreation activities in the area. As the major business enterprise, employer, and tax generator, Paragon Park affects the future of amusements in the project area.

There are several options possible for the park. The existing facilities could be remodeled, perpetuating the current atmosphere and attractions. The park could be rehabilitated into a theme park, perhaps along oceanic or historical lines, with the elimination of some rides and the creation of new ones. The park could develop year-round activities through construction of an auditorium or enclosed buildings.

Recent planning articles have discussed the strength and appeal of theme parks as a uniquely American amusement idea. The Council feels that Paragon Park, in conjunction with the town, should pursue the possibility of developing it into a theme park. The ocean setting might provide one workable theme, or the historic nature of the roller coaster and carousel might lead to the reintroduction of rides popular at the turn of the century.

To attract investors, MAPC suggests that Paragon Park pursue the possibility of selling its name, to finance new construction or reconstruction. At the turn of the century, for example, the park contained the Schlitz Palm Garden, and the possibility of such an affiliation should not be discounted today. There may be sources without a liquor orientation; the Sheraton Corporation has proposed to buy the name of a new Boston Garden. Major toy or game companies also can be approached. Investment in Paragon Park could be profitable as improvements to the entire area serve to strengthen individual establishments.

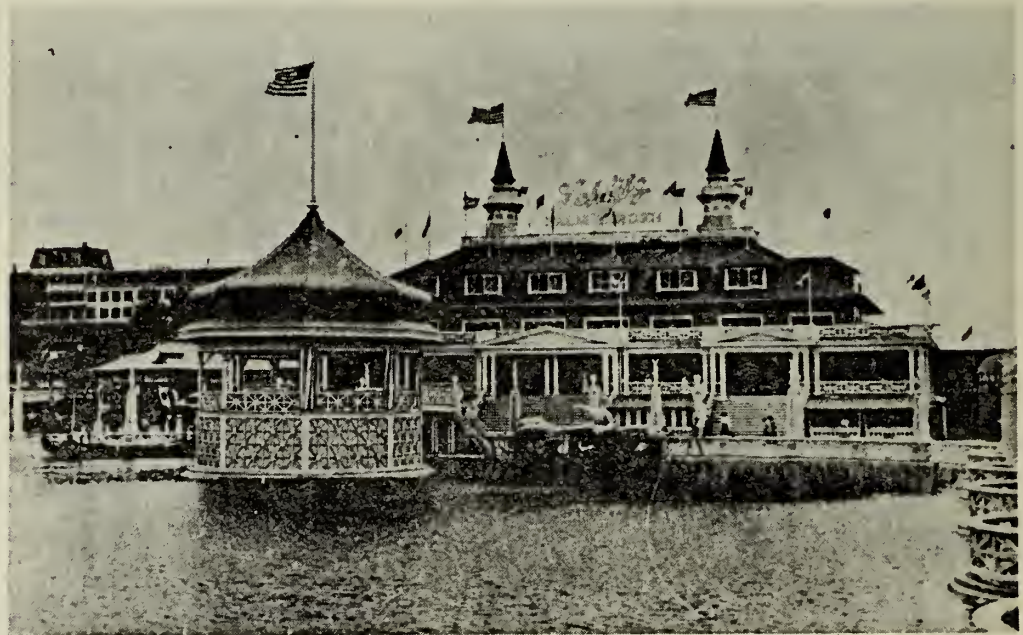
Further discussions with a theme park consultant would clarify the options available. Whatever is chosen, the success of Paragon Park will directly affect the success of other development prospects. If the atmosphere surrounding Paragon Park feels like that of a struggling business with unattractive rides and games, then the area and of course its development potential will suffer. Renewal, attractive rides and games, and a unifying theme will spur additional development and promote the entire area.

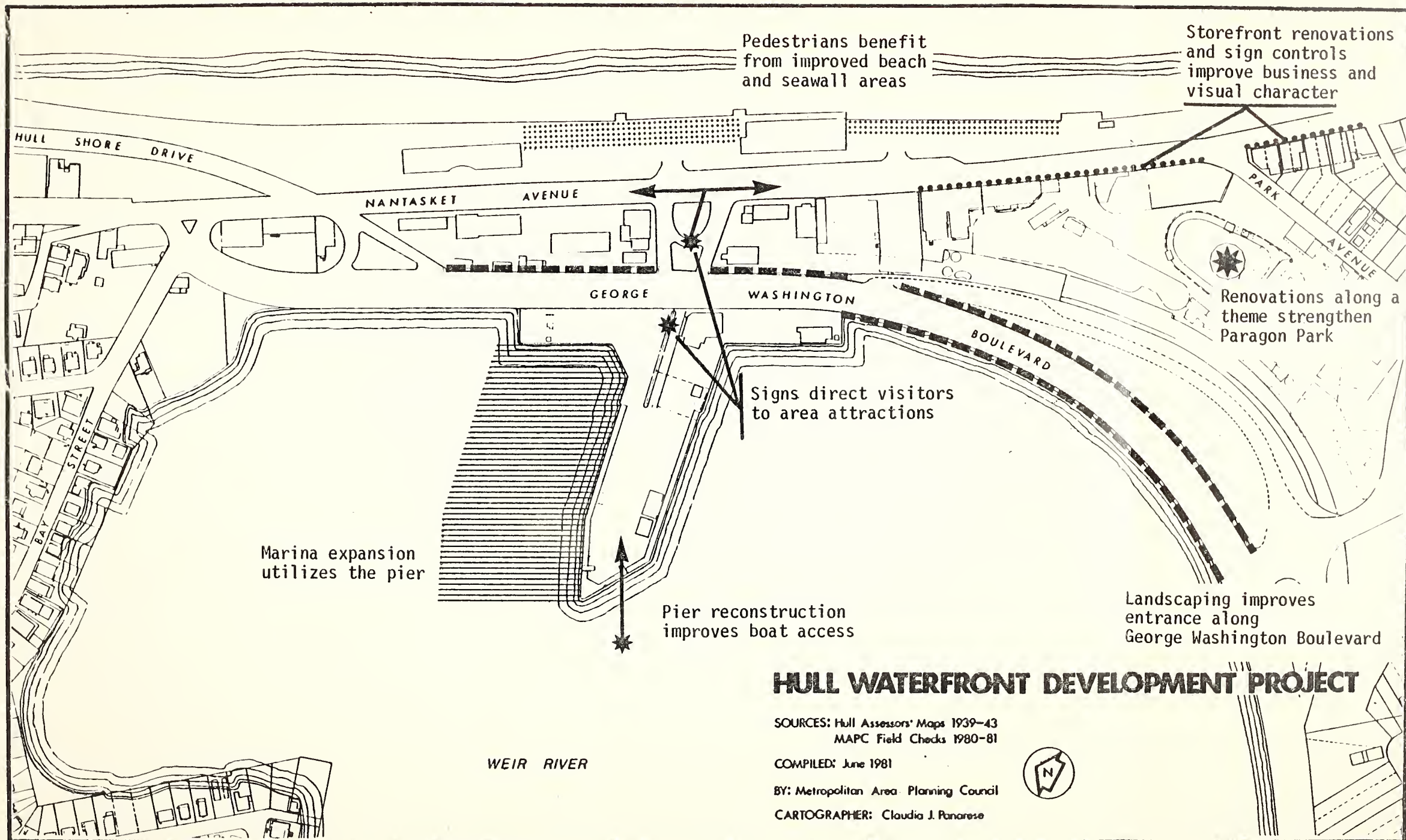
Any renovation of Paragon Park will be dependent on private funds. Although the town of Hull should review how the money will be spent, the management of the amusement park is primarily responsible for any reconstruction work.

G. Sagamore Harbor

The location, size, and environmental problems of the Sagamore Harbor development site make it less desirable for marina development. Perhaps, after the remaining urban-renewal areas have been developed, suitable small-scale uses might be appropriate for the site. In fact, MAPC anticipates the successful development of the oceanside renewal parcel

by the Hull Redevelopment Authority. Proposals for residential and commercial/retail uses on the oceanside would benefit the local tax base, employment levels, and the economy in general. In the meantime, MAPC recommends that the bayside site be improved into public open space. A bayside park would be an amenity to neighboring residential areas and any new residential construction. MAPC also recommends that the town consider using Sagamore Harbor, if feasible, as a relocation site for saltmarsh and/or shellfish beds.





HULL WATERFRONT DEVELOPMENT PROJECT

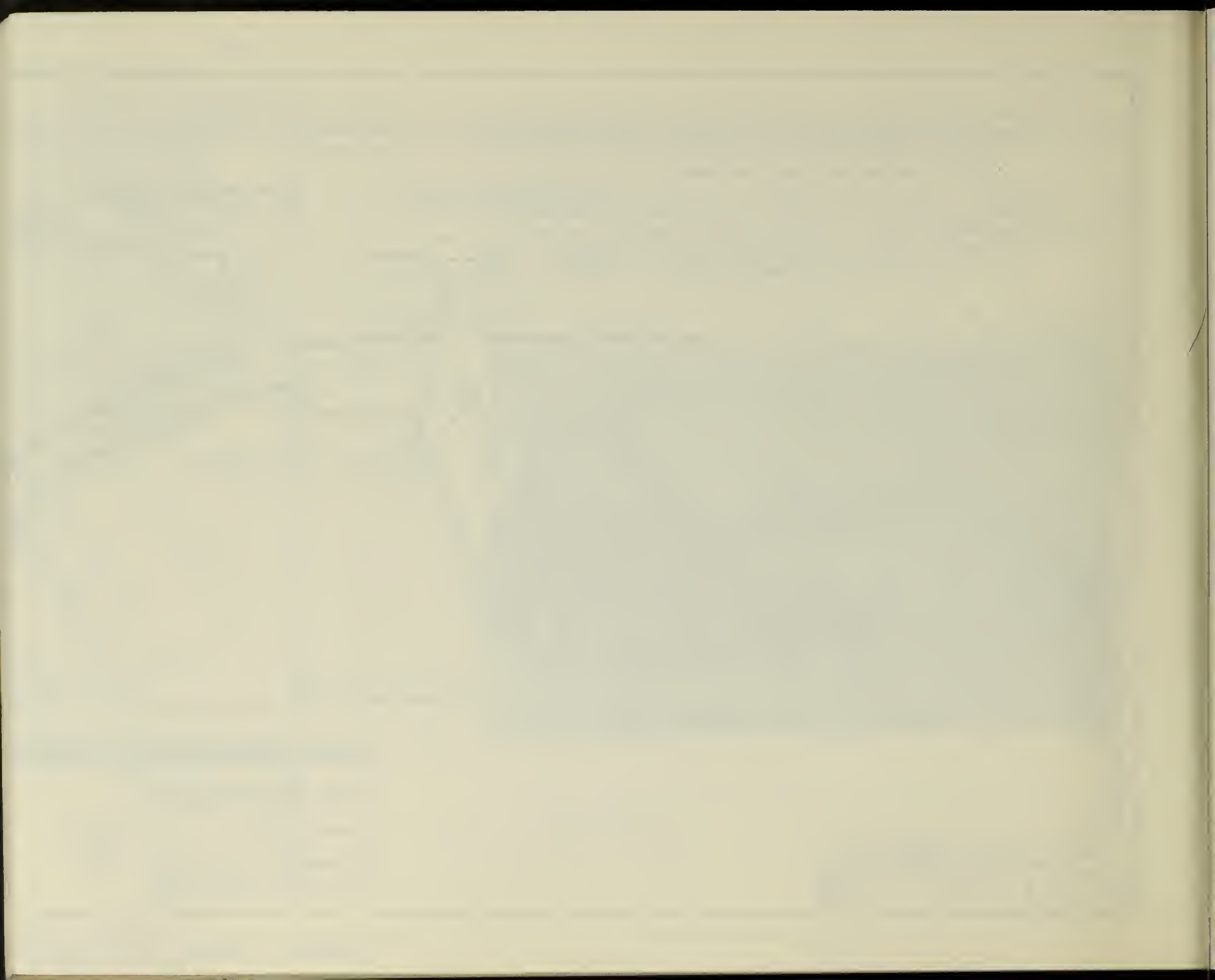
SOURCES: Hull Assessors' Maps 1939-43
MAPC Field Checks 1980-81

COMPILED: June 1981

BY: Metropolitan Area Planning Council

CARTOGRAPHER: Claudia J. Panarese





WEIR RIVER MARINA: ITS ECONOMIC FEASIBILITY

The idea of a marina in Sagamore Harbor has long been a focus of development plans for Hull's redevelopment area. Plans for this site have ranged from a modest development (100-200 slips) to an enormous one (500-1000 slips). Proposals for associated development have spanned almost every conceivable ancillary use, from motels and restaurants to "specialty" retail and housing. Yet despite this high level of interest, economic analyses have not been thorough.

As a result of this incomplete picture and the activity of the Metropolitan Area Planning Council (MAPC) in the project area anyway, MAPC has agreed to provide a preliminary examination of the economic feasibility of one of these development proposals. It represents the latest thinking by the Hull Redevelopment Authority (HRA) and the consulting engineers (Metcalf and Eddy, or M&E) retained by the State's Department of Environmental Quality Engineering to examine the engineering feasibility of the project, as well as the thoughts of other community and development interests.

Weir River Marina: Proposed Development

The present proposal includes two levels of development that are consistent with previous suggestions. The first, at a modest intensity, proposes a 200 slip marina with a restaurant and commercial area. The second is much larger, consisting of a 500 slip marina, a restaurant, commercial area, and motel.

For purposes of analysis, it is important to distinguish between the marina itself and the ancillary uses. Although it is a common practice to locate these uses adjacent to marinas and to derive some (often considerable) spillover from the marina activity, they are drawing on a fundamentally separate market. In particular, the sizing of these facilities, their integration into the overall program, and the degree of support they may expect to derive from the marina are all quite variable and will be addressed later in this appendix.

The proposed development strategy under the present plan differs from its predecessors in two important ways: it builds additional land area required as a peninsula into the cove rather than along the shoreline, and it does not attempt to use material dredged from the cove as fill for the new area. By selecting the peninsula arrangement it is possible both to avoid the destruction of a considerable area of salt marsh and to shorten the length of the required access channel. By disposing of dredge material at sea and using higher-quality fill, potential environmental problems of land disposal are avoided and better foundation conditions are assured with less heroic construction techniques. Both actions, however, add considerably to construction costs. The peninsula arrangement entails a much longer and more costly bulkhead, and dredging and filling incur additional costs of distant ocean disposal and the purchase of fresh fill. It is the matching of these and other construction, acquisition, and operating costs to revenue projections that makes for the project feasibility assessment.

Costs

For the purposes of this analysis, costs are considered to be all those of acquiring, constructing, and operating a marina. These include the estimated costs of actual operations as well as the ongoing costs of the capital facilities (e.g., maintenance). The analysis will be conducted in two ways: one, a "free and clear" basis, under which the time value of money is reflected by discounting the future value of revenues in order to express their present worth; and two, by comparing revenue projections to annual costs under a given set of financing assumptions. The first of these techniques is helpful since it accurately reflects the start-up costs of an enterprise of this sort with interest rates, return, risk premium, etc. reflected in the selection of a discount rate. The second technique is more graphic but is implicitly biased toward an optimistic assessment, since it does not include an explicit assessment of the start-up.

Land Acquisition

Existing land required for both development scenarios, is contained in parcels 14 and 15 of the redevelopment area. Consideration of autonomous ownership of a portion of one of these parcels and its potential adverse impact on development has been excluded from this analysis. These parcels were appraised at \$100,000 and \$96,000 in 1978. Allowing for inflation, especially in land prices, the combined value of these parcels should now be in the neighborhood of \$300,000.

Construction Costs

Metcalf and Eddy have estimated costs for the basic engineering structures of the alternative developments at \$8.7 million and \$19.9 million for the 200 and 500 slip marinas. These estimates do not include any buildings, parking lots, or other facilities, nor have they been apportioned between the marina and ancillary uses described.

Based on very rough unit costs for 1981 and on the sizes provided by Metcalf and Eddy, the breakdown of additional structural costs is as follows:

TABLE 1
Additional Sagamore Harbor Development Costs

	<u>\$/Sq.Ft.</u>	<u>200 Slip Marina</u>		<u>500 Slip Marina</u>	
		<u>Sq.Ft.</u>	<u>Cost</u>	<u>Sq.Ft.</u>	<u>Cost</u>
Marina uses:					
Launch Bldg.	\$ 16.90	4,200	\$71,000	4,200	\$71,000
Chandlery & Office	27.50	6,895	189,600	8,260	227,000
Parking (Marine Store)	1.65	83,050	<u>137,000</u>	161,800	<u>267,000</u>
TOTAL			\$397,600		\$565,000
Ancillary Uses:					
Restaurant	\$ 54.30	11,000	\$597,000	11,000	\$597,000
Commercial	27.50	43,000	1182,500	43,000	1182,500

(continued)

TABLE 1 (continued)	\$/Sq.Ft.	200 Slip Marina		500 Slip Marina	
		Sq. Ft.	Cost	Sq. Ft.	Cost
Motel	\$ 34.60	-	-	13,750	\$476,000
Parking	1.65	19,700	\$32,500	62,500	103,000
TOTAL			\$1,812,000		\$2,358,500
<u>TOTAL</u>		\$2,209,600		\$2,923,500	

By apportioning these costs of marina and ancillary uses based on the relative land area of each type of facility, the following breakdown is obtained:

TABLE 2
Sagamore Harbor Development Costs (\$x1000)

	200 Slip Marina			500 Slip Marina		
	Marina uses	Ancillary uses	Total	Marina uses	Ancillary uses	Total
Land Acquisition	200	100	300	200	100	300
Major Development	5801	2857	8658	13318	6559	19877
Building and Parking	398	1812	2210	565	2358	2293
TOTAL	6399	4769	11168	14083	9017	22470

Operating Costs

Operating costs for marinas are highly variable and difficult to predict. However, some estimates must be made if any projection of economic feasibility is possible. One study (Adie, 1977) has suggested that a reasonable mature operating cost (after the facility is completely established) might be in the neighborhood of 65% of gross slip rentals. In this analysis, those costs are considered to be for operating the marina, including staff, management, utilities, promotion, maintenance, etc. Of equal importance, however, are start-up costs. The same study suggested that these might

amount to a declining percentage of slip rentals over a three-year rental period and a one-year preparation time during which construction was completed and sales begun. The preparation year might normally be designated as an industrial facility's (i.e., 1% of capital costs), but the extremely high capital costs in this case make this an unlikely value. Instead, the preparatory operating costs have been set at 25% of the mature costs, on the theory that it costs about the same to promote a single docking slip in expensive and inexpensive projects. On this basis, projected operating costs are outlined in Table 3.

TABLE 3
Marina Operating Costs (\$)*

	Start-up Year	Year 1-50% Rental	Year 2-75% Rental	Year 3-100% Rental
200 Slips	\$24,000	\$ 60,000	\$ 79,000	\$ 98,000
500 Slips	61,000	150,000	197,000	244,000

* Includes all costs of operating the marina as an enterprise, not just as a capital facility (i.e., staff, management, promotion, insurance, maintenance, etc.).

Admittedly very approximate, these figures will nonetheless serve as a guide. Additional costs such as property taxes will be assessed in the final analysis at 2½% total capital-improvement value.

Revenues

Estimates of revenues are at least as difficult to make as estimates of cost. The best technique appears to be estimating total income from an initial estimate of seasonal slip rentals. This is based on the theory that related marina income will be dependent on the intensity of use, which is perhaps best reflected in these slip rentals. Other direct sources include winter storage, repairs, sales of new and used

boats and engines, chandlery sales, etc. In most instances, seasonal slip rentals have been found to constitute about 20 percent of total revenue and this figure has been selected for this examination.

Slip rentals for the marina will depend on three factors: slip absorption, fee schedule, and composition of the fleet. Previous work by MAPC has shown a good market for marina slips. Despite major expansions in both Hewitt's Cove in Hingham and in Scituate Harbor, it is assumed here that either a 200 or a 500 slip marina would achieve 100 percent absorption. A study of the fee structure on the South Shore has shown a likely range to be \$25 to \$30 per foot per season. Owing to high capital costs, the higher rate has been selected for use here. Based on the fleet-size distribution, the average length was found to be 24 to 25 feet, resulting in an estimated seasonal revenue of \$750 per slip. Although a certain percentage of slips normally are set aside for transients, for simplicity it has been assumed that the transient-fee structure will be such that their slips approximate the seasonal rate. Based on these figures, income attributable to the marina alone is summarized in Table 4.

TABLE 4
Marina Income (Annual)

	<u>200 Slips</u>	<u>500 Slips</u>
Slip Rental	\$150,000	\$ 375,000
Total Income (@ 5 x slip rental)	\$750,000	\$1,875,000

Marina Economics

For this examination, two techniques of economic analysis have been used. In the first, that of present-worth analysis, all factors - the time value of money, inflation, profit, etc. - are reflected in the discounting of future costs/revenues by a discount rate. For this preliminary analysis, the rate of 20 percent has been selected as indicative of probable

existing conditions, but it must be remembered that more specific information and future fluctuations of inflation, interest rates, etc. could alter this drastically.

A development scenario has been selected for each marina alternative. Although it's rather optimistic, it has been assumed that all costs of development will be incurred in year one for the 200 slip marina and be distributed equally over year one and two for the 500 slip version. Rentals would begin in years two and three respectively, to allow time for construction and other preparation, and grow from 50 percent to 75 percent to 100 percent yearly. Subsequent years remain constant, with profit or loss discounted to show the present worth of the funds. These results are illustrated in tables 5 and 6.

TABLE 5
200-Slip Marina - Present Worth (x\$1000)

Year	% Rentals	Income	Capital Costs	RE Tax*	Operating Costs	Net Cash	@ 20%	Cumulative Profit(loss)
0	0	0	\$ 300	0	0	(\$300)	(\$300)	(\$300)
1	0	0	\$ 6,099	87.5	\$ 24	(\$6,130.5)	(\$5,578.5)	(\$5,878.8)
2	50	\$ 375	0	35.8	\$ 60	279.2	212.2	(\$5,666.6)
3	75	\$ 562.5	0	35.8	\$ 79	445	280.4	(\$5,386.2)
4	100	\$ 750	0	35.8	\$ 98	616.2	326.6	(\$5,059.6)
5	100	\$ 750	0	35.8	\$ 98	616.2	271.1	(\$4,788.5)

* RE tax based on appraised value of land whether existing or created @ \$75,000/acre plus value of improvements other than those required to create new land.

TABLE 6
500-Slip Marina - Present Worth (x\$1000)

Year	% Rentals	Income	Capital Costs	RE Tax*	Operating Costs	Net Cash	@ 20%	Cumulative Profit(loss)
0	0	0	\$ 300	0	0	(\$300)	(\$300)	(\$300)
1	0	0	\$ 6,891.5	7.5	\$ 61	(\$6,960)	(\$6,333.6)	(\$6,663.6)
2	0	0	\$ 6,891.5	39.4	\$ 61	(\$6,991.9)	(\$5,313.8)	(\$11,947.4)
3	50	\$937.5	0	71.3	\$ 150	\$716.2	\$451.2	(\$11,496.2)
4	75	\$1,406.2	0	71.3	\$ 197	\$1,137.9	\$603.1	(\$10,893.1)
5	100	\$1,875	0	71.3	\$ 244	\$1,559.7	\$686.3	(\$10,206.8)

* See note at Table 5

After year five, the net cash remains constant for each alternative but its present worth continues to decline with subsequent years. This declining present worth is very serious for an investment of this sort; at 20 percent, revenue after 25 years is worth only about 1% of present value. This problem is so serious for these very high front-end-cost projects that neither marina configuration can ever be considered to have even recouped the costs of construction at a discount rate of 20 percent no matter how long the payback is considered to be.

As a further illustration of the seriousness of this very high front-end expense, an alternative analysis has been provided. This incorporates the time value of money more directly by assuming 100 percent of capital costs to be financed. This technique therefore incorporates the opportunity cost of any investment of equity by the developer, as well as direct-finance charges. For the purposes of this analysis, capital has been assumed to be

financed at 15% over 20 years -- about as advantageous terms as might be expected from any revenue bond or assisted financing. Ignoring start-up costs and examining a yearly return for the two marinas:

TABLE 7
Annual Cost & Revenues (x\$1000)

	<u>200-Slip Marinas</u>	<u>500-Slip Marinas</u>
Acquisition & Capital improvements @ 15%	\$1,022.4	\$2,250.0
Real Estate Taxes	35.8	71.3
Operating Costs	<u>98.0</u>	<u>244.0</u>
Total Costs	\$1,156.2	\$2,565.3
Marina Income	750.0	1,875.0
Net Profit/(loss)	(406.2)	(690.3)

Based on extremely optimistic financing terms and construction schedules, the 200- and 500-slip marinas can be expected to break even after about 33 years and 29 years, respectively. Any delays in permits or construction or less advantageous financing would, of course, worsen this picture considerably. Thus the extremely high capital costs associated with both alternatives make them dubious investments as marinas alone. The proposal as offered, however, includes a number of ancillary uses whose relationships to the marina must be examined.

Ancillary Uses

Both alternative marina schemes call for extensive ancillary development. This is generally in keeping with current development practice, which clusters uses together that might provide support for one another. In the case of Sagamore Harbor, a restaurant and commercial area have been proposed for the smaller program and a restaurant, commercial area, and motel have been proposed for the larger.

Support from these ancillary uses would be expected to derive from two sources -- direct marina patronage and the local market area in general. General market conditions for these uses have been discussed in the body of the MAPC report and are here only summarized. Basically, it was felt that the best economic opportunities were for a first-rate restaurant with marginal market support for both a motel and retail development, especially specialty retail. The marginal qualities of these were due largely to the seasonal market base, poor road access, and lack of other extensive "attractors" in Hull, especially non-seasonal ones.

Although a marina would do nothing to relieve the seasonality of Hull's market, it would provide a certain amount of direct market support. The amount of this support must vary considerably and it has been estimated to be as high as 2½ times the seasonal slip rentals for this type of ancillary activity. Using this as a guide and normally accepted square foot incomes for these uses, projected totals for each use may be developed.

TABLE 8
Supportable Ancillary Uses

	<u>Available Revenue</u>	<u>Retail</u>	<u>Specialty Retail</u>	<u>Restaurant</u>	<u>Motel (rooms)</u>
\$/Sq.ft. or					
room	NA	\$ 75	\$ 100	\$ 100	\$8,500(/room)
200 Slips	\$375,000	\$ 5,000	\$ 3750	\$ 3750	44
500 Slips	\$937,500	\$12,500	\$ 9375	\$ 9375	110

Each of these figures assumes that 100 percent of the available dollars for ancillary uses are spent on that use alone. In general, however, they would be expected to be spent about equally among uses. Results for the expected mix of uses are in Table 9.

TABLE 9

Ancillary Uses Supportable Directly by Marina Traffic

	<u>Retail</u>	<u>Restaurant</u>	<u>Motels (rooms)</u>
200 Slips	2500 Sq.Ft.	1875 Sq.Ft.	Not Proposed
500 Slips	4170 Sq.Ft.	3125 Sq.Ft.	37 Rooms

Therefore, proposals for 19,700 sq.ft. of restaurant space, 43,000 sq.ft. of retail sapce, and a 100-room motel must expect to draw extensively on the local market base. This is possible, especially in the case of the restaurant, especially in a waterfront location. It is doubtful, however, that development of these ancillary uses would be adequate to alleviate the serious deficits of the marina itself.

Discussion

Marina development, although traditionally very attractive as a vehicle for economic development in waterfront locations, is subject to excessively high capital costs. This problem is so severe that few new marinas are built in New England today, most new moorings and slips being developed as expansions at existing facilities. This is especially pertinent to Sagamore Harbor, where extensive dredging and ocean disposal, an unusually long bulkhead, and expensive new fill are proposed.

In some instances, it is possible that the public benefit of developing a marina may weigh in favor of public construction, thereby defraying the cost limitations to private developers. In this case, the secondary effects of economic multipliers, employment opportunities, increase in property values, and stimulus to business conditions are considered worth the investment. It is doubtful that these factors pertain to the Sagamore Harbor area for several reasons: (1) Hull does not have the industrial and commercial base necessary for itself to absorb much of the multiplier effect of marina spending; (2) it is likely that there are other equally good, less costly opportunities for marina development in Hull; and (3) the project location in a cleared

redevelopment area provides for numerous more-profitable opportunities for improving property values and business conditions.

In the case of the proposals for Sagamore Harbor a heavy reliance would be placed on the ability of ancillary uses to make up for heavy marina losses in the early years. This is less attractive than it might at first appear. Out of a study of 49 existing marinas in Narragansett Bay (Rhode Island, 1975) only three had lodging as an ancillary use. Of them, two, a Treadway and the Sheraton Islander, were in Newport, drawing heavily on that community's recognized tourism. In fact, the marinas have frequently been considered ancillary to these two large inns.

Further, since the development must rely so heavily on the ancillary facilities for revenues and these facilities must tap their own markets for success, it would appear that the marina still has problems. Specifically, it is possible to develop all ancillary facilities without a marina at all on existing land, thereby realizing all potential revenues without expensive dredging, bulkheading, and filling.

Based on very high capital costs and the availability and desirability of other locations, the prospects for marina development at Sagamore Harbor, then, are poor.

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